

SENATE

THURSDAY, SEPTEMBER 19, 1963

The Senate met in executive session at 10 o'clock a.m., and was called to order by the President pro tempore.

Hon. KENNETH B. KEATING, a Senator from the State of New York, offered the following prayer:

Our Heavenly Father, we commend ourselves to Thee. Wilt Thou guide our minds, our hearts, and our lips in everything we do, that we may better serve our country and, above all, serve Thee.

Wilt Thou be with all the Members of the Senate and their families, particularly with those who may now be impaired in health or suffering in some manner unknown to their colleagues.

We thank Thee for the help Thou hast given in the past to our Nation and to those of us who endeavor to serve our Nation in the Halls of Congress.

We ask it in Thy name on this day of dedication. Amen.

Mr. MANSFIELD. Mr. President, I wish to take this means to express to the distinguished Senator from New York [Mr. KEATING] my deep appreciation for the prayer he has just offered. It was most moving and touching, and I think it was in the best possible taste. I believe the Senate is indebted to this distinguished Member of the Senate for the prayer he offered in the Senate Chamber this morning.

COMMENTS ON SENATORS' DECISIONS ON THE NUCLEAR TEST BAN TREATY

Mr. MANSFIELD. Mr. President, I have been disturbed by a trend during the course of the debate on the question of Senate approval of the nuclear test ban treaty, as reflected by a tendency on the part of columnists, commentators, cartoonists, and organizations, to question the integrity and motives of Senators in connection with their decisions to vote either for or against Senate approval of the treaty.

In my opinion the treaty has caused a great deal of soul searching by the great majority of Senators. I do not question the motive of any Senator in connection with his consideration of the treaty, because I know each Senator has given the matter deep and thoughtful consideration; and I am sure each Senator is aware of the terrible responsibility which is his as an elected official.

No Senator has been irresponsible. No Senator has sought to delay the Senate's consideration of the treaty. No Senator has advocated anything except what he thought would be in the best interests of the United States.

Therefore, Mr. President, I hope that when this issue is decided, no columnist, commentator, cartoonist, or organization will impugn the patriotism or good faith of any Senator, but that, instead, all will realize that the Senate, in its collective wisdom, will have done its best in facing this knotty and difficult question.

Insofar as patriotism, integrity, and responsibility are concerned, these labels

should be applied equally to all Senators—both to Senators who vote in favor of Senate approval of the treaty and to Senators who vote against it.

ORDER FOR ADJOURNMENT TO TOMORROW AT 10 A.M.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that when the Senate concludes its business today, it adjourn until 10 o'clock tomorrow morning.

The PRESIDENT pro tempore. Without objection, it is so ordered.

NOMINATION

Mr. MANSFIELD. Mr. President, I ask that the Senate now proceed to consider the nomination on the Executive Calendar.

COMMODITY CREDIT CORPORATION

The legislative clerk read the nomination of George L. Mehren, of California, to be a member of the Board of Directors of the Commodity Credit Corporation.

The PRESIDENT pro tempore. Without objection, the nomination is confirmed.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the President be immediately notified of the confirmation of this nomination.

The PRESIDENT pro tempore. Without objection, the President will be notified forthwith.

Mr. MANSFIELD. Mr. President, for the information of the Senate, let me state that, in the opinion of the leadership, the action just taken does not constitute a break with our statement that no other business would intervene before final action on the treaty was taken. The nomination has the unanimous approval of the committee, and meets with the approval of the leadership.

TRANSACTION OF ROUTINE LEGISLATIVE BUSINESS

Mr. MANSFIELD. Mr. President, I ask unanimous consent that, as in legislative session, there be a morning hour, and that statements in that connection be limited to 3 minutes.

The PRESIDENT pro tempore. Without objection, it is so ordered.

THE JOURNAL

On request of Mr. MANSFIELD, and by unanimous consent, the reading of the Journal of the proceedings of Wednesday, September 18, 1963, was dispensed with.

COMMITTEE MEETING DURING SENATE SESSION

On request of Mr. MANSFIELD, and by unanimous consent, the Subcommittee on Housing, of the Committee on Banking and Currency, was authorized to meet during the session of the Senate today.

PERSONAL STATEMENT BY SENATOR ROBERTSON

Mr. ROBERTSON. Mr. President, I ask unanimous consent to have printed in the RECORD at this point as a part of my remarks two items from the news ticker, dealing with my complaint that an Associated Press story last Monday misrepresented the views I expressed in a Senate speech opposing ratification of the limited nuclear test ban treaty.

There being no objection, the items were ordered to be printed in the RECORD, as follows:

WASHINGTON.—Senator A. WILLIS ROBERTSON, Democrat, of Virginia, complained in the Senate today that an Associated Press story last Monday misrepresented the views he expressed in a Senate speech opposing ratification of the limited nuclear test ban treaty.

ROBERTSON said in the Monday speech: "Knowing what I do about the military issues involved, I would violate the dictates of my conscience if I voted for the pending treaty."

In the Associated Press story, a sentence intended to quote ROBERTSON as saying it would violate his conscience to support the treaty quoted him inadvertently as saying that he would "violate the dictates of my conscience" to support the pact.

A correction was sent later but the original version of the story was published in some newspapers.

ROBERTSON told the Senate today he had seen the erroneous story in Monday's edition of the Los Angeles Herald-Examiner. He read a telegram he sent to that newspaper asking that it publish a correction "making clear that I oppose the treaty, that I am going to vote against it, and that I said so in my floor speech, Monday, September 16."

ROBERTSON told the Senate the Associated Press is "a fine agency and they did not mean to misrepresent me," but added: "I have received telegrams and letters which expressed the feeling that the writers were shocked that a man would violate his conscience by voting for the treaty."

Senator HUBERT H. HUMPHREY, Democrat, of Minnesota, told ROBERTSON, "I know the distinguished Senator from Virginia is not really worried about this misquotation because there is not a living mortal in Virginia or outside Virginia who would ever believe that the Senator from Virginia would vote against his conscience and what his conscience directs him to do."

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. SPARKMAN, from the Committee on Banking and Currency, without amendment:

H.R. 772. An act to provide for the transfer for urban renewal purposes of land purchased for a low-rent housing project in the city of Detroit, Mich. (Rept. No. 508); and

H.R. 4842. An act to amend the Federal Credit Union Act to extend the time of annual meetings, and for other purposes (Rept. No. 509).

JOINT COMMITTEE ON THE ORGANIZATION OF CONGRESS—REPORT OF A COMMITTEE—INDIVIDUAL AND SUPPLEMENTAL VIEWS (S. REPT. NO. 504)

Mr. HAYDEN. Mr. President, from the Committee on Rules and Administration, I report favorably, with an amendment, the concurrent resolution

the right of self-determination of governments responsive to the will of the people.

Now, the violations: In Hungary, acting through the Hungarian Communist Party and its own agencies and armed forces in Hungary, Red Russia suppressed the will of the Hungarian people by installing the minority Communist dictatorship and denied Hungary fundamental freedoms. The same thing was done in Rumania and Bulgaria.

I now go to Poland. In 1932 on July 25 Red Russia signed an agreement that there would be no aggression of Red Russia on Poland and not by Poland on Red Russia. We all remember this stab in the back on September 17, 1939, when Poland was fighting Germany on the west and Red Russia attacked Poland on the east.

I now go to the United States. In 1933 when Red Russia was begging the United States to establish trade relations with Russia, just as Kadar is now doing, and Litvinov wrote a letter to our Government committing himself that on Russian soil no agency would be permitted to exist contemplating intruding communism upon other nations of the world.

In violation of that Litvinov letter undoubtedly about which you know, the Comintern was in existence and they were attempting to communize the world.

No. 10, Finland. There was an agreement that before Russia and Finland were engaged in war that the issue would be submitted to arbitration, and that in no event would resort be made to war until 3 months after the report of the arbitrators. On November 26, 1939, the Soviet Government attacked Finland.

I now come to Hungary of 1956. When those patriots took control of the government and Imre Nagy was in charge, Red Russia said, "We will remove the Red Russian troops. Pravda will tell the story."

The story was carried throughout the United States, but while we were relying upon that promise they were bringing in their tanks and their guns and their military men.

No. 12, German reunification. On July 23, 1955, the Foreign Ministers of the Governments of France, United Kingdom, the United States, and Red Russia stipulated, the heads of Government have agreed, that settlement of the German question shall be by means of a free election. That was repudiated and broken.

We now come to China, subject 13. The alliance between the Republic of China and the Union of Red Russia agreed to work together in close and friendly collaboration after the coming of peace following World War II, and to act according to the principles of mutual respect for their sovereignty. That treaty was broken.

Then we come to the very significant Potsdam agreement on Germany. It was promised that Germany would not be scalped and denuded of all its economy. The signatories to that promise kept it except Red Russia, and it carried out everything it possibly could causing us to pour huge sums of money into Germany to reestablish the economy. There were other commitments made in the Potsdam agreement that were broken.

I now come to the Kellogg-Briand Treaty, which is significant. The Kellogg-Briand Treaty outlawed war as an instrument of national policy. The Red army invaded Manchuria on October 12, 1929, 1 year after it promised to outlaw war. Here we are sort of outlawing the nuclear tests. I wonder how long we can rely on that.

Japanese war prisoners. It was agreed by Red Russia that it would return those prisoners. It still has not done it.

Korea, item No. 17. It was agreed on December 27, 1945, there shall be set up a provisional Korean Democratic Government. There shall be a joint commission to pro-

vide a four-power trusteeship of Korea for a period up to 5 years. From the very beginning, the Russian representative refused to collaborate and to act in pursuance to that agreement.

No. 18, the return of German prisoners of war from the concentration camps, it still has not been done. Then we have had the peace treaties with Hungary again and Rumania and Bulgaria also violated.

Now, may I ask, Mr. Secretary, which is the last agreement that Red Russia has violated? I have in mind the Cuban commitment that we would have the right to inspect and ascertain whether the missiles were removed. Am I correct in that or not?

Secretary RUSK. That was a basis for the exchange, basis of the exchange between the President and Khrushchev during the week beginning October 22.

Senator LAUSCHE. That promise was not kept.

Secretary RUSK. That is correct, sir. As you recall, Castro would not accede to that.

Senator LAUSCHE. Yes. That is, the commitment was made that neutral nations would be permitted to go in and see whether the missiles were removed. That commitment was not executed, is that correct?

Secretary RUSK. That is correct, sir; but there were certain alternative arrangements that were made, as you remember.

Senator LAUSCHE. I have a letter here from the State Department saying that we are not bound by the promise not to invade or any of the other promises that we made because the commitment of Khrushchev was not kept to allow us to inspect.

Now, I ask you, in the face of this fragmentary recitation of breaches of commitments, if we are to judge Red Russia in the future by what it has done in the past, what can we expect?

Secretary RUSK. Senator, I am quite familiar with this somber story. I think myself that we should consider whether or not it is the present intention and purpose of the Soviet Union to comply with this treaty without necessarily at this stage trying to guarantee to ourselves that this will be their attitude forever into the future.

I believe that there would be no particular reason for them to enter into this treaty unless they had a present intention of living up to it, for two reasons. One is that violations of this treaty are highly subject to detection, and the cost to the Soviet Union throughout the world in terms of quick signature, and a quick violation would be very high.

Second, they have paid a significant price in their terms for this treaty, because this has precipitated in the sharpest possible form the attack by Peiping on the Soviet Union based upon this treaty, and this has created even deeper divisions and more hostile divisions within the Communist world than had occurred before. But we can't ignore the record that you have exposed here this afternoon.

Therefore, we must ask ourselves whether the interests of the United States are adequately protected in the event of violation. I think that answer is "Yes," but I think this is an answer that the Senate has to find out for itself.

The CHAIRMAN. The Senator's time is up. Senator LAUSCHE. Just one-half minute.

For 5 years in the Foreign Relations Committee, behind closed doors and to questions put to you since you have become Secretary, I argued that there never can be a consortium between the 700 million Chinese and the 240 million Russians. Red China is looking for lebensraum, and its eyes are directed into Russia, and that was inevitable in my judgment, as it will grow worse as time goes on.

Mr. President, I have tried to bring myself to the judgment of approving

this test ban treaty. My reasoning, however, simply prevents me from doing so. I am convinced that the treaty is not in the interests of the security of our country. It imposes military disadvantages upon the United States while it grants to Russia positions of favor to which it is not entitled. The treaty will be adopted. It would have been more comfortable for me to have followed the crowd. To have done so, however, would have required an abandonment of an honest judgment and the adoption of a course which I deeply believe is neither in the interests of peace nor the security of the United States. Whatever deterrents have come to the efforts of Red Russia to expand its boundaries have been the consequence of Russia's understanding that while we wanted peace, we did have the might and the will to maintain the honor and the security of our Nation. Peace will prevail in the world so long as the United States retains that position of strength, but not any longer.

On the basis of the facts as I understand them as herein set forth, I will cast my vote against this treaty.

Mr. ROBERTSON. Mr. President, I am happy to hear the Senator from Ohio say that he will vote against the treaty. I hope that he does not have as much difficulty in being quoted on that statement as I have had in being quoted to the effect that I shall vote against the treaty.

I read an article in the newspaper today stating that all but five Senators will be for the treaty. I made a speech of over an hour in which I said that I would be against the treaty. First, I found a piece on the front page of a newspaper which stated that the distinguished Chairman of the Foreign Relations Committee had said that I had lied. Of course, he had not. But the article indicated we were about to fight a duel over the treaty.

Mr. HUMPHREY. Mr. President, will the Senator yield?

Mr. ROBERTSON. Then the Associated Press sent out that story. I do not know why they did. As soon as I could get the floor, I denied the statement.

A District of Columbia newspaper published the story under the heading of "Loud Speakers in the Senate." At the conclusion of the article there appeared the statement that I had denied the charge, and then there was printed what actually occurred. All right. Then the Associated Press—and I know that it is a fine agency and did not mean to misrepresent me—transmitted a story to the effect that I had said that I was going to violate my conscience by voting for the treaty. I have received telegrams and letters which expressed the feeling that the writers were shocked that a man would violate his conscience by voting for the treaty.

Mr. HUMPHREY. Mr. President, will the Senator yield?

Mr. ROBERTSON. I yield.

Mr. HUMPHREY. I read the story in the Washington Post, to which the Senator referred, about microphones in the Senate. This morning I have noted no need for such microphones. The Sen-

ator from Minnesota has seldom been accused of needing a microphone. The Senator from Ohio speaks with such eloquence and clarity that he does not need a microphone.

Mr. LAUSCHE. And brilliance. [Laughter.]

Mr. HUMPHREY. And brilliance, yes, and persuasive eloquence. The Senator from Virginia if the Associated Press will misquote him, will never need a microphone. Nevertheless, I wish to come out for microphones. Once again I shall support a resolution that would modernize the Senate Chamber. I do not believe we ought to go too far because we might upset some of the old traditions. But at least we can go so far as doing what our fellow Members of Congress do in the other body. We might install microphones so that the people in the galleries and the reporters in their gallery might be able to hear at least the official deliberations that go on in the Chamber.

Mr. ROBERTSON. We might at least go down to a well, as is provided in the House, and there have a microphone through which we could address our colleagues. Then those in the gallery could also hear.

Mr. HUMPHREY. Such an arrangement would eliminate any trouble about where a Senator should stand. The present rule requires that he stand at his desk.

Mr. ROBERTSON. The Senator from Virginia does not suffer from any throat trouble. He is sure that the representatives of the fine news agency called the Associated Press can hear him when he reads a copy of a telegram that he sent yesterday to the managing editor.

Mr. LAUSCHE. Mr. President, will the Senator yield?

Mr. ROBERTSON. I yield.

Mr. LAUSCHE. How will the Senator vote on the treaty?

Mr. ROBERTSON. The Senator from Virginia thought that he had made crystal clear that he would vote against the treaty. I shall read a telegram which I sent to the newspaper which published the statement that I would violate my conscience by voting for the treaty. I know that the publisher did not intend any double entendre or double meaning. I said that I would violate the dictates of my conscience if I did not vote against the treaty.

It is all in this telegram.

Mr. HUMPHREY. Mr. President, will the Senator yield at that point?

Mr. ROBERTSON. I yield.

Mr. HUMPHREY. I know the distinguished junior Senator from Virginia is not really worried about that misquotation, because there is not a living mortal in Virginia or outside Virginia who would ever believe that the Senator from Virginia would vote against his conscience and what his conscience directs him to do. There are times when I wish the Senator's conscience would lead to a little different point of view, but the Senator is always true to his conscience, and the Associated Press was only having a joke. There is no doubt about that. It really made a sort of humorous mistake.

Mr. ROBERTSON. I do not think the Associated Press would try to perpetuate a joke on a Member of the Senate. Somebody has engaged in some proliferation of words about the treaty. It is a bit difficult, in writing it all up, to see exactly how anyone could misconstrue it.

I will tell the Senator what happened. I will read the telegram.

MANAGING EDITOR,
Los Angeles Herald Examiner,
Los Angeles, Calif.:

On page A-2 of your issue of Monday, September 16, 1963, you carry an Associated Press story quoting me as saying that I would violate the dictates of my conscience to support the test ban treaty. I said in my speech that I will vote against the treaty because it would violate the dictates of my conscience to support it, in view of information I have received about the dangerous military consequences if it is ratified. I am receiving mail from your readers expressing outrage that I intend to violate my conscience in order to support the treaty, which is what the erroneous sentence says but is the exact opposite of my stand. Please publish a correction making it clear that I oppose the treaty, that I am going to vote against it, and that I said so in my floor speech Monday, September 16.

Mr. LAUSCHE. Mr. President, will the Senator yield?

Mr. ROBERTSON. I yield.

Mr. LAUSCHE. It is a strange coincidence that in my mail today I received a letter containing the following:

DEAR FRANK: The gist of the attached clipping is that somebody put one over on Congress, and as a result, millions of our tax dollars are being wasted by the Area Redevelopment Administration.

Senator ROBERTSON, Democrat, of Virginia, is mentioned as one who is getting wise.

That is in a letter from a constituent in Ohio.

For the grief which the Senator has suffered from the misquotation by the newspapers, I hope this will be some balm to him, that the sincerity of his work is spreading into our State.

Mr. ROBERTSON. That is encouraging. I admit that I have gotten more national publicity from a story that a man called me a liar than anything I have done in the Senate in 17 years. That is the way these news items are built up.

Mr. THURMOND. Mr. President, Adm. Chester Ward, U.S. Navy, retired, former Judge Advocate General of the U.S. Navy, has prepared a very interesting article for next week's issue of the American Security Council's "Washington Report." It is entitled "Beyond the Ban: the 'Destruction Gap.'" So that the Members of the Senate might have an opportunity to read this material prior to the final vote next week, I ask unanimous consent that Admiral Ward's outstanding article be printed in the body of the RECORD at the conclusion of these remarks.

Mr. President, I also ask unanimous consent that at the conclusion of these remarks an article written by the distinguished military correspondent of the Baltimore Sun, Mr. Mark S. Watson, entitled "Side Effect of A-Blast Worries Foes of Ban," be placed in the body of the RECORD. This article ap-

peared in the Sun on September 14, 1963.

There being no objection, the articles were ordered to be printed in the RECORD, as follows:

[From Washington Report, American Security Council]

BEYOND THE BAN: THE "DESTRUCTION GAP"—JOINT CHIEFS OF STAFF WARN TREATY GUARANTEES SOVIET SUPERIORITY

In the new era opened by the Treaty of Moscow and envisioned by President Kennedy in his address to the U.N. General Assembly—the United Nations, regardless of how much it may be strengthened as an instrument for maintaining world peace, will not have the power to restrain the Soviet Communists from world conquest. Nor will the United States.

Momentous testimony by the Joint Chiefs of Staff reveals: (1) that the Soviets have a 3-way lead in the only type of weaponry sufficiently powerful to control the world; (2) that U.S. adherence to the Moscow Treaty will guarantee continuance of the Soviet lead; and (3) that Soviet superiority in strategic high-yield weaponry is of a type which renders irrelevant or impossible of execution, the so-called unqualified and unequivocal assurances against the treaty's operating to imperil American security.

It reveals also that Secretary of Defense McNamara's claims of vast U.S. "nuclear superiority" will soon depend upon our striking first (which we will never do), with manned bombers (which we will no longer have). His claims of "missile superiority" are based on numbers alone, and ignore the fact that Soviet weapons exceed ours in explosive power by from 30 to 100 times. His claims of "technological superiority" sound as if they covered the entire spectrum of weaponry, but actually refer primarily to what Joint Chiefs of Staff call very-low-yield tactical weapons, which run to less than one-thousandth of the power of the range in which the Soviets hold guaranteed supremacy.

Would you be willing to stake your life—and the lives of your children—on the accuracy of the administration's assurance that the Treaty of Moscow will not imperil the security of the Nation?

You would be dead now—if your life had been staked on the accuracy of the administration's assurance last September, that there was no substantial danger of Soviet offensive weapons in Cuba.

You would be dead now if your life had been staked on the accuracy of the administration's assurance, up until September 1961, that adhering to the first test ban did not imperil U.S. security.

The September 1961, strategic miscalculation of risk cost us—as has just been officially conceded for the first time—our superiority in the only nuclear weapons powerful enough to control the world—those with the explosive power of tens of millions of tons of TNT.

The September 1962, strategic miscalculation of risk needlessly and uselessly exposed scores of millions of Americans to nuclear incineration; and we were saved from the threat of a nuclear surprise attack only by the grace of God and an aerial photograph.

The September 1963, strategic calculation of risk has been made. President Kennedy has assured the Senate, by letter of September 11, 1963, that the Treaty of Moscow is "safe and necessary." It was only last September, however, that he assured the public that the "increasing numbers" of Soviet shipments of arms to Cuba were "under our most careful surveillance," and that "I will repeat . . . that these shipments do not constitute a serious threat to any other part of this hemisphere." Then, in less than a

month came the U-2 aerial photographs. Later, he was wrong also about the Soviets keeping their promise of on-site inspections.

This September, your life has been staked on the administration's assurance that the risks involved in this third deal with the Soviets are small, and that our national security can be fully maintained in the new era opened by the Treaty of Moscow. The survival of the United States is also at stake.

If the administration is wrong again in its calculation of risks, you may lose your life in a nuclear Pearl Harbor—or lose your way of life as a result of Soviet ultimatum demanding surrender.

There is hard evidence that the administration is wrong again. It can not be photographic evidence, of course—but like the U-2 photograph that saved us last time, it is evidence more factual than opinionative in nature. Also, like the aerial photograph, its warning can be understood only through subjecting the facts revealed, to an analysis to develop their strategic meaning.

The import of the warning is so momentous as to overshadow the conclusion of the Senate Preparedness Investigating Subcommittee Report, issued on September 10, that the Treaty of Moscow will result in "serious, perhaps even formidable, military and technical disadvantages to the United States."

The source of the warning is a comprehensive "JCS Position Paper." It was prepared with reference to "this particular treaty at this particular point in time." The Joint Chiefs of Staff adopted it only after extensive deliberations and consultations with the Department of State, the Atomic Energy Commission, the Central Intelligence Agency, the Office of the Secretary of Defense, and others "with particular competence and responsibilities in the field." It was submitted to the Senate committees by the Chairman of the Joint Chiefs of Staff, testifying under oath. None of its statements, therefore, can be discounted.

Here are the key assertions of the JCS position paper. They are phrased in the most unsensational of technical language. They offer, however, a still timely warning of the most horrendous danger ever to threaten the national existence of the United States.

1. The Soviet Communist objective: "Militant communism remains dedicated to the destruction of our society."

2. Soviet capability of carrying out our destruction: "The USSR is ahead of the United States in the high-yield—tens of megatons—technology, in weapons-effect knowledge derived from high-yield explosives, and in the yield/weight ratios of high-yield devices."

3. Treaty of Moscow guarantees permanence of Soviet superiority in weapons of tens of millions of tons explosive power: "If * * * both sides faithfully observe its provisions * * * the United States would not be able to overtake the present advantage which the U.S.S.R. probably has in the high-yield weapons field, whereas the Soviets, by underground testing, could probably retrieve in time any lead which we may presently have in the low-yield tactical field."

The military Chiefs were not, of course, free to explain the meaning of these stark and somber facts. An objective strategic analysis, however, on the basis of those facts will assign to the Treaty of Moscow a significance unprecedented in all history: The most powerful nation in the world, with a present vast superiority of strategic military power in-being is: (1) abdicating its position of world supremacy, and (2) is guaranteeing to its enemy the capability—without challenge and without time limit—of developing overwhelming strategic supremacy sufficient to destroy the formerly most powerful nation, without risking devastating retaliation.

How can the Moscow Treaty operate to guarantee the Soviets the capability of developing overwhelming strategic nuclear power, if the United States holds such a vast supremacy in such power now?

The Joint Chiefs' position paper supplies the facts which provide the answer to that pivotal question. The same JCS facts provide the answer also to the equally significant question: How can Secretary of Defense McNamara's claims of U.S. "missile superiority" and "nuclear superiority"—under cover of which he is scrapping all U.S. manned bombers—be at least partially or even technically true, and still be grossly deceptive to Senators and citizens?

Here is how it works. The JCS, referring to the Soviet superiorities in "high yield devices"—meaning both bombs and missiles—and to the "probable" U.S. superiority in the field of very-low-yield tactical weapons, explain:

"It is important to emphasize that the superiority under discussion * * * refers essentially to technological superiority. It does not take into account such superiority as derives from numbers of weapons, variety of delivery systems, and magnitude of nuclear plant and stockpile. Hence technological superiority is only one aspect of the net superiority which must take into account all these factors.

"As to net superiority in ability to inflict damage on the enemy, the JCS consider that the United States is clearly ahead of the U.S.S.R. in the ability to wage strategic nuclear war, and is probably ahead in the ability to wage tactical nuclear war, whereas the Soviets have developed substantial mid-range ballistic missile capability."

This necessarily sounds—superficially—as if it is backing up the McNamara claims. It had to sound that way, or JCS could not have said it. Actually, strategic analysis is necessary to reveal what it really means.

More than 90 percent of our present nuclear striking power—that is, "ability to inflict damage on the enemy" has to be delivered by manned bombers. These bombers are capable of carrying about 30,000 million tons of explosive power. McNamara's "more than 500 missiles" can deliver a total of about one-thirtieth of the bomber load. Thus our net superiority, which is our present "nuclear superiority" depends on the SAC bomber force being in existence and being operational.

A Soviet surprise missile strike with less than 15 minutes warning—such as from Cuba or by missile submarine—could destroy about 90 percent of our bombers in their soft bases. Thus our superiority (and the overkill which even Mr. Kennedy has referred to) depends upon the United States striking first.

President Kennedy has officially declared that we will not strike first. Hence the statements of our "net" superiority based on our striking first, are deceptive. So also are such statements as "We have enough nuclear power to kill 300 million people in 60 minutes. How many weapons do we need?"

Even without a Soviet no-warning surprise attack, however, our net superiority and our lead in "ability to inflict damage on the enemy," will soon vanish. McNamara is far advanced in his program of scrapping U.S. bombers, and has killed all programs for their replacement by advanced type bombers. As soon as his scrapping program is complete, we will have abandoned more than 90 percent of our total nuclear striking power, and all of our massive nuclear striking power. His program contemplates cutting down our capability from between 30,000 and 40,000 million tons of explosive power based overwhelmingly on bombers, to 2,000 million tons depending almost exclusively on missiles. U.S. Navy aircraft carriers have a substantial delivery capability, but McNamara's programs contemplate cutting them also, and

reducing the number of strike aircraft the remaining ships may carry.

As soon as the U.S. SAC bombers are taken out of operational status, missile superiority will control the world.

When missile superiority controls the world. The Soviets have both technological and operational superiority in missiles now, and the Treaty of Moscow will guarantee the continuance of their superiority in the future. This is the meaning of the JCS statement. "The U.S.S.R. is ahead of the United States in the high-yield—tens of megatons—technology * * * and in the yield/weight ratios of high-yield devices. * * * If the treaty goes into effect * * * the United States would not be able to overtake the present advantage which the U.S.S.R. probably has in the high-yield weapons field."

This concedes to the Soviets an existing and guaranteed for the future capability of opening a massive "missile-explosive power gap." This gap already amounts to thousands of millions of tons of TNT explosive power. The Soviets have the capability of opening the gap by orders of magnitude each year, if the United States remains bound to McNamara's low-powered missile program and the Moscow Treaty. As soon as the U.S. bombers vanish, the "missile gap" will become a "destruction gap" because it will give them the greater power to inflict damage on the enemy. When the "destruction gap" becomes massive enough, it will amount to a "deterrent gap" because our retaliatory strike capability will no longer be relatively powerful enough to deter the Soviets from a surprise attack or delivering an ultimatum.

The new missile gap will result not from numbers, but from warhead power. Warhead power in turn depends upon yield/weight ratio and the warhead weight which the missile can deliver, which depends on the rocket thrust power. The Soviets are substantially ahead in both factors. Destructive effect of missiles (on a target which will not be "overkilled" by one hit) goes as two-thirds of the power of the warhead. That is, increasing the explosive power of the warhead by a factor of 3 is the same as doubling the number of weapons. The CEP factor of accuracy of guidance is also crucial. An improvement of 20 percent is considered as equivalent to doubling the yield of the warhead, but only for the purpose of destroying hardened military targets the location of which we know exactly. Both Soviet and United States accuracy is so good now, there is little room left for improvement. Both are known to be accurate within a half a mile—and it is not considered too much of an exaggeration to say that "We can hit an airfield—but the Soviets can hit a football field."

These statistics may seem boring now, but the survival of the United States and the lives of scores of millions of Americans depend upon an understanding of them.

Without them, it is impossible to understand how much—or how little it means, for McNamara to claim: "The U.S. force contains more than 500 missiles * * * and is planned to increase to 1,700 by 1966. * * * The Soviets are estimated today to have only a fraction as many ICBM missiles. * * * Between now and 1966, it is estimated that our ballistic missile numerical superiority will increase both absolutely and relatively."

The Soviet "fraction" of 500 could, of course be 400 or more—but it would be ridiculous to credit them with less than 120 ICBM's. Even Newsweek does (August 5, 1963), and the news "leaked" to it is generally close to U.S. estimates. The Soviets claim about 1,000.

Our missiles now probably average 3 megatons of explosive power: theirs, 30 megatons. Our number 500 times 3 megatons = 1,500 megatons. Taking a low number for them, 120 times 30 megatons = 3,600 megatons. This would give them a net missile

explosive power gap of already 2,100 megatons, that is, 2,100 million tons of TNT equivalent. This gap will widen with extreme rapidity in the near future as the United States phases out its liquid-fueled Atlas and Titan I missiles which carry 5 or 10 megatons, and concentrates production on the 1-megaton Minuteman and Polaris.

McNamara plans a total missile force by 1966 of 950 Minuteman, 656 Polaris, and 54 Titan II. The explosive power in the total of their warheads would probably equal about 3,496 megatons. If the Soviets should build one-fourth as many, the explosive power of their warheads would equal 14,525 megatons. The explosive power gap in their favor would amount to some 11,029 megatons. The "destruction gap" would amount to 7,352 megatons. We would thus need more than 7,000 more Minuteman missiles to fill the gap.

We aren't going to get them—not in McNamara's programs. Yet investing in 8,000 missiles would not be too high a price to pay for the survival of the United States. The realistic answer, however, is not such large numbers of missiles, but an increase in their explosive power. Leading nuclear strategists have recommended an increase by a factor of 5 or 10. To attain this, as verified by the JCS paper, we need atmospheric testing. Under the Moscow Treaty, we have signed away our right to take this measure required for our national self-preservation.

Thus, just as the Cuban deal gave a U.S. guarantee against invasion, to assure Soviet Communist control of Cuba, the Moscow deal gives a U.S. guarantee of continuing Soviet nuclear power to control the world.

The controlling strategic factor in the world balance of power during the new era opened by the Moscow Treaty, will be the massive missile gap. Life will be different, for you and your family, and for all Americans. As then-Senator John F. Kennedy prophetically asserted in 1958, America would soon become the "underdog"—as the result of the "gap" or "missile-lag" period. This he defined as a period "in which our own offensive and defensive missile capabilities will lag so far behind those of the Soviets as to place us in a position of great peril."

The JCS position paper establishes the fact that the Soviets have now, and that the treaty guarantees them for the future, the capability of creating exactly such a gap.

Ironically, the missile gap which John F. Kennedy attributed to the Eisenhower administration was imaginary—whereas the gap created by Kennedy administration policies is so real it will shape the future of the world. And it has been made permanent by treaty.

What will be the strategic results? The Kennedy predictions, which were completely wrong for the indicated period of 1960-63, are completely right for the period 1964 to the end of the McNamara defense policies and the termination of the Moscow Treaty. They are even much more accurate, because in the new area there will be no U.S. SAC manned-bombers to more than fill the destruction gap. Here are some extracts from one of his series of articles entitled "Years of the Gap," published nationally by the Hearst Headline Service, and carried in the Los Angeles Examiner of August 24, 1958. Using the same substance, he made the missile gap a major issue in the 1960 presidential campaign.

1. The "coming years of the gap will present us with a peril more deadly than any wartime danger we have ever known."

2. "As the missile striking power of the Soviet Union increases, and our own retaliatory power lags . . . the deterrent ratio might well shift to the Soviets so heavily during the years of the gap as to open to

them a new shortcut to world domination . . . A direct Soviet attack may be our greatest danger throughout the years of the gap."

3. "We are about to lose the power foundation that has long stood behind our basic military and diplomatic strategy. We have possessed a capacity for retaliation so great as to deter any potential aggressor from launching a direct attack on us. This premise will soon no longer be correct."

4. "The Soviet . . . missile power will be a shield from which they will slowly but surely advance . . . through the vicious blackmailing of our allies. The key areas vital to our security will gradually undergo Soviet infiltration and domination. Each such Soviet move will weaken the West—but none will seem significant enough by itself to justify our initiating the nuclear war that might destroy us."

The developments pictured by Kennedy, including the direct Soviet attack on us, will not wait until McNamara has scrapped the last U.S. bomber. Khrushchev's huge investment in his present antiaircraft missile program proves he does not intend to wait that long. Effective deterrence depends on our having enough bombers to saturate his air defenses. This we will lose as soon as McNamara scraps enough of them, so that the Soviet surprise missile salvo, plus air defenses, can take care of the rest. Our 1-megaton missile retaliatory capability, blunted by his growing and treaty-guaranteed high-yield missile superiority, is not sufficient to deter him.

What can be done? The most urgent step is to scrap McNamara's policies of no bombers and small missiles, before they scrap us.

Until we attain missile superiority in destructive power as well as numbers, we need more bombers. We can get them by resuming production of B-52's until we can rush mass production of RS-70's. We must increase our airborne alert, and arm our bombers with 60-megaton bombs. We must mount Polaris missiles on surface ships.

For the future, we must develop a reasonably invulnerable missile force capable of delivering 20 kilomegatons of big-warhead retaliation. Its command, control, and communications systems must be proof against knockout by Soviet superweapons. This force, not the United Nations, is the only power which can secure both world peace and the survival of the United States.

To build this U.S. force for peace and survival, we have tremendous assets. Our program for 54 powerful Titan II missiles can be trebled. Our huge new peaceful space program rockets can be converted to the more realistic peaceful purpose of effectively deterring war. We can develop more powerful warheads for our missiles.

For in missiles—as in planning effective strategy for national defense—it's what's up front that counts.

Rear Adm. CHESTER WARD,
U.S. Navy, Retired,
Associate Editor.

[From the Baltimore (Md.) Sun, Sept. 14, 1963]

SIDE EFFECT OF A-BLAST WORRIES FOES OF BAN—SCIENTISTS OF AIR FORCE POINT TO BY-PRODUCT AFFECTING ELECTRONIC EQUIPMENT

(By Mark S. Watson)

WASHINGTON, September 13.—Despite the public spanking administered to the Air Force Association by Eugene M. Zuckert, Secretary of the Air Force, for its bold opposition to the nuclear test ban treaty, numerous nuclear scientists of the Air Force continue in opposition.

Their concern about cessation of tests, it now appears, stems principally from the mystery surrounding a phenomenon of which the public now knows little but of which it

is certain to hear more and more as research into EMP becomes more intensive.

AFFECTS ELECTRONIC DEVICES

EMP is the accepted abbreviation for "electromagnetic pulse," one of the byproducts of nuclear explosion. Its power is unmistakably such as to affect electronic equipment of every sort, including instruments for fire and guidance of our own ballistic missiles, that is, threatening the value of the ICBM itself, which now constitutes our chief war deterrent. The question is of how strong is the EMP's effect and how far does it reach.

Even the term is dealt with cautiously, and its use has repeatedly been censored out of official statements, including expert testimony before congressional committees, even though on many other occasions ranking officials have spoken or written of their concern over U.S. science's uncertainty about the electromagnetic pulse.

CENSORED BY POWER

Fundamentally their chief concern is that Russian military science, benefiting from the 1961 nuclear tests, may know much more than we do about EMP and its effect upon radio, radar, and other electronic processes. That concern helps explain reluctance on the part of the Air Force to block off American tests aimed at catching up with Russia.

Quite certainly this is one of the subjects originally touched on by Gen. Thomas S. Power, Chief of the Strategic Air Command, in his much-censored speech of yesterday before the Air Force Association. After censoring was completed his speech still said: "There are uncertainties concerning effects of high-yield nuclear weapons on our missile sites which will have to ride out the initial attack."

That suggests that, in theory, a Russian ICBM, sent against one of our ICBM missile-site complexes, even if unable to incapacitate any large number of the widely dispersed ICBM's by blast effect, could incapacitate the missiles themselves by EMP whose effect reaches much further, and conceivably deeper below ground, than the blast.

Viewed in its worst aspects, this could provide second thoughts about the U.S. present "second-strike" policy. That policy, frequently stated this past year, contemplates accepting an enemy's first strike in the confidence that surviving U.S. resources could "ride out the initial attack" in Power's phrase, and then launch a mighty counter-strike against the enemy, sufficient, as asserted by Robert S. McNamara, Defense Secretary, to wipe out the enemy's military resources.

QUESTION RAISED

The question now raised against the treaty (without effect on the Senate vote, it appears) is over the ability to "ride out" not only the blast power, which can be pretty well calculated but the EMP power, which at present is not computable at all and will not be without test.

A General Electric expert has surmised that a 1-megaton explosion could have effect upon electronic devices within a radius of 100 miles. It is understood that the pulse radiation from one of Russia's high-yield 1962 tests did in fact black out a U.S. satellite much farther off.

Also it has been reported that a mere 20-kiloton test on the Nevada nuclear test site affected power lines circuit breakers 100 miles away. It was this latter disclosure which lately spurred new U.S. Army Signal Corps efforts to develop electronic equipment less sensitive to radiation.

EMP works both ways. If its powers are such as to enable Russian ICBM's (in theory) to inactivate ours, it is certain that American ICBM's might do the same thing to Russia's—but only if they are used first, which is contrary to U.S. policy, and only if their powers are tested and proven, which is not in sight.

Whether military disadvantages outweigh political advantages, as contended successfully, it is not for the military to say. But it is manifest that there is little public knowledge of what the military disadvantages really are.

VETERANS OF FOREIGN WARS RESOLUTION
OPPOSING NUCLEAR TEST BAN TREATY

Mr. STENNIS. Mr. President, the Veterans of Foreign Wars of the United States, at its 64th National Convention, gave its attention to the nuclear test ban treaty now under debate. This fine organization includes within its membership many of the foremost thinkers and leaders of our times who are thorough and painstaking and are prompted by the highest consideration of security for our Nation and the free world.

I have before me the resolution 258 of the V.F.W. in opposition to the approval of the nuclear test ban treaty, to give the Congress and the people of the Nation the benefits of the logic and reasons set forth in the resolution, I ask unanimous consent that it be included in full in the body of the RECORD.

There being no objection, the resolution was ordered to be printed in the RECORD, as follows:

RESOLUTION 258, OPPOSING PROPOSED LIMITED
ATOMIC TEST BAN TREATY

Whereas the Soviet Union has broken over 1,000 treaties and agreements since 1917 as attested to by Senate Internal Security Document No. 125; and

Whereas the Soviet Union has signed treaties of nonaggression with neighboring states and then absorbed the states and has signed promises to refrain from revolutionary activities inside these countries with which it sought friendship and then cynically broke these promises; and

Whereas since that time we have seen nothing but a continuance of treaties broken by the Soviet Union, including the Soviet violations of the nuclear test ban moratorium; and

Whereas the proposed limited atomic test ban treaty, as other Soviet agreements, could be broken—this time with the nuclear vaporization of humanity: Now, therefore be it

Resolved, by the 64th National Convention of the Veterans of Foreign Wars of the United States, That we recommend that the U.S. Senate, in light of the previous treaty violations of the Soviet Union, do not approve the proposed limited atomic test ban treaty.

LET US STOP THE POISONOUS RADIOACTIVE
FALLOUT

Mr. GRUENING. Mr. President, I wish to make a few brief remarks on the limited test ban treaty now before the Senate.

Almost 4 months ago—on May 27, 1963—I joined 32 of my colleagues in cosponsoring a resolution offered by the able and distinguished senior Senator from Connecticut [Mr. DONN] to achieve precisely the result sought by the treaty now presented to the Senate. The operative portions of that resolution provided as follows:

Resolved, That it is the sense of the Senate that the United States should again offer the Soviet Union an immediate agreement banning all tests that contaminate the atmosphere or the oceans, bearing in mind that such tests can already be monitored by the United States without onsite inspections on Soviet territory.

That if the Soviet Union rejects this offer, as it has in the past, on the grounds

that it wants a ban on all tests or nothing at all, we should not bow to this rejection but should, on the contrary, reiterate our offer and pursue it with vigor, seeking the widest possible international support for our position;

That if the Soviet Union refuses to accede to such a first-step agreement, we commit ourselves before the world to conduct no nuclear tests in the atmosphere or under water so long as the Soviet Union abstains from them; and

That, in committing ourselves to such a moratorium, either unilaterally or by agreement, we keep the Soviet record of deceit and bad faith in mind, and maintain our testing facilities in a state of constant readiness so that the United States will never be caught unprepared should the Soviet Union suddenly resume nuclear testing in the atmosphere or under water.

I have listened to and read carefully the arguments advanced against the Senate's giving its unreserved advice and consent to this treaty. While I appreciate the ability and sincerity of those who are advancing these arguments against unconditional ratification of the test ban treaty, I cannot agree with their arguments.

True, we cannot trust the Soviet Union—that we have been taught through bitter experience.

True, the masters of the Kremlin have a long record of breaking treaties.

True, Khrushchev announced their purpose to "bury the United States."

True, they have invaded Alaskan waters, torn up the crab traps of Alaskan fishermen and taken fish in our waters forbidden them by international law.

True, they have been guilty of a variety of unjustifiable acts. They have never hesitated to practice deception, nor is there any evidence of any change of heart or purpose.

Even though we recognize these truths while not condoning them, even though we fully appreciate the perfidiousness of the men in the Kremlin and the need to be constantly on our guard against treachery, nevertheless we can, on the basis of all the testimony, safely enter into this treaty because the advantages to our own Nation in taking such a step far outweigh any possible disadvantages.

Those of us who sponsored Senate Resolution 148 last May were fully aware of these realities. Nevertheless we sponsored the resolution because we firmly believed that whatever risks remained could be safely averted by maintaining a constant state of readiness to resume testing—which the President has promised to do—and that it was essential for something to be done—and done promptly—to avoid further contamination of the atmosphere.

The proximity of the State of Alaska to the Soviet Union has made Alaskans particularly exposed to the dangers of radioactive fallout. My able colleague, Senator BOB BARTLETT, has repeatedly stressed the poison from radioactive fallout that has stricken our Alaskan Eskimos. It has poisoned the lichens on the arctic tundra. The lichen is a rootless plant which absorbs its nourishment from the atmosphere, and it has absorbed the radioactive fallout generated by the tests in Siberia and carried eastward by the winds. It is on the lichens and moss that the vast herds of caribou

in northern Alaska feed. They have taken the radioactive fallout into their bodies. Caribou meat is one of the principal foods on which the inland Eskimo depend. They in turn have been poisoned.

On September 12, in a major speech on the floor of the Senate, my colleague [Mr. BARTLETT] went into the whole subject exhaustively, ranging far beyond the effects in Alaska and citing in detail the findings of a number of distinguished scientists—Canadians, Americans and others—who have testified in their scientific publications to the increased incidences of congenital deformities, leukemia, and cancer, clearly attributable to the nuclear testing in the atmosphere and in the space above the earth's atmosphere. My colleague has rendered a great service.

I consider Senator BARTLETT's scholarly research made available to the Senate and the public—perhaps for the first time—to present an unanswerable factual presentation of the necessity of stopping all nuclear testing in the air and sea.

The test ban treaty before us is the first imperative step. Can we decently fail to take that first step? Can we, by abstention or opposition, sanction the daily malformation, agony, and lingering death of some of this generation and of countless numbers of succeeding generations? Hardly.

Mr. President, despite the arguments so eloquently advanced by the able and distinguished chairmen of the Senate Armed Services Committee and the Preparedness Subcommittee, whose views I deeply respect, I am convinced we can enter into this treaty for a limited ban on atmosphere or ocean contaminating tests without endangering the security of the free world.

We can do so safely by remaining alert and ready at all times to resume testing if this agreement is breached, though I hope and pray that this need will not arise. I am convinced that we can overcome by preparedness any sudden resumption of testing on the part of the Soviet Union. That being so, then the advantages to the United States—and to all the peoples of the world—of a cessation of the constant pollution of the atmosphere and the contamination of mankind are great, indeed.

Mr. President, I am not sanguine about the future actions of the Soviet Union in the light of its willingness to enter into this limited test ban treaty. I would like to see some evidence of a new attitude, of a new purpose. But I refuse to peer into any crystal ball to determine whether this action on the part of the Soviet Union indicates an easing of the tensions of the world in the future. We can hope so, but that is all. We must judge each future action of the Soviet Union on its own merits, warily, and with a full realization of the intentions of that country as shown by its past history. But on balance, without interpreting the Soviet Union's willingness to enter into this treaty as the hoped-for beginning of an era of lessened tension and peace, it is my sincere belief that, for the sake of future generations,

the United States can and must enter into this treaty.

I shall therefore vote in favor of giving the Senate's advice and consent to this limited test ban treaty.

Mr. HRUSKA. Mr. President, in his address to the Nation announcing the conclusion of the treaty which now lies before us for ratification, the President called for "a historic and constructive debate." That debate is now nearing the time of decision. It has been conducted in committee rooms, on the floor of this Chamber, in homes and halls across America, and in all the public media. We can congratulate ourselves that it has been conducted responsibly and with a keen regard for the gravity of the issues involved.

TREATY HIGHLIGHTS

Mr. President, stated in simple terms—and perhaps in oversimplified fashion—the treaty has for its objective a pledge by the three major signatories—the Soviet Union, the United Kingdom, and the United States—to stop testing nuclear weapons in space, in the atmosphere, and in the common waters of the oceans. Duration of this pledge is set out as that period of time until one of these three nations serves 90-day notice that it will resume testing.

The treaty will not do certain things. It will not stop signatory nations from making nuclear weapons of any kind; nor maintaining their present or increased arsenal of nuclear weapons; nor use of such weapons in defense of any signing nation or its allies against aggression. It will not halt preparation for any of the prohibited test explosions right down to the point of pressing the button; nor will it stop underground test explosions. It will not totally prevent further poisoning of the atmosphere by radioactive fallout because neither France nor Red China are parties to it and both are engaged in active nuclear weapons development and testing programs.

DURATION OF TREATY

It is provided that any party to the treaty has a right to withdraw from it upon 3 months' notice if it decides that its supreme interests are jeopardized. A more likely method of termination, however, is a summary and unceremonious breaking of the treaty by the Soviet Russians the very minute such action suits their purpose better than continuing under its terms. This point will be developed at greater length later in my remarks.

The treaty was agreed to by the three major nations in July of this year. However, the idea of a limited test ban agreement was first advanced to Soviet Russia in April, 1959, by President Eisenhower, with British support. His letter proposal called for a prohibition on atmospheric tests up to 50 kilometers, without on-site inspections being required. The Soviets rejected the Eisenhower proposal.

FACTORS UNDERLYING HRUSKA DECISION TO FAVOR RATIFICATION

Without exaggeration, Mr. President, the ultimate issues raised by this debate go to the existence of this Nation and the principles for which it stands. They go

to the very existence of our civilization which it is our purpose to preserve against all obstacles and all enemies. Also they go to the aspirations of men of good will everywhere in the world, that the far prospect of eventual peace—however dim—is something more than a cruel deception; and that the immediate cessation of further radioactive fallout—however small—is a substantial gain for humanity for whatever period it lasts, however long that may be. It is in the spirit of hope, matched by an alertness to every potential danger and a determination to keep ready our massive military power and to take other safeguard steps, that I will cast my vote in favor of ratifying this limited test ban treaty.

This decision has been reached against a background of some doubt and brutal realism. It was reached with difficulty. This decision has been shaped by all the participants in this historic debate—a debate that has indeed been constructive, informative, and exhaustive.

Chief among these participants is President Kennedy, whose letter of September 10 set out eight "unqualified and unequivocal assurances to the Members of the Senate, to the entire Congress, and to the country." These eight points verified much of the testimony of Secretary of State Rusk and others who appeared in person before the Foreign Relations Committee, and who gave interpretations of language and outlined our Nation's intended course of action under the treaty.

My decision has also been greatly influenced by the testimony of the Joint Chiefs of Staff, and by their considered judgment that—on sober balance—the strengths of the treaty outweigh its weaknesses, that the benefits exceed the risks. Our military posture will unquestionably be affected by the test ban. But it will not be compromised.

And I would be gravely remiss if I did not acknowledge, as well, my debt to those who have in dedicated fashion conducted and participated in the committee hearings and who have engaged in the debate in this Chamber. This includes those who have opposed the treaty outright; and those who will, in the end, cast their votes against it. To cite just one example, the questions so well posed and the arguments so eloquently advanced by my colleague, Senator CURTIS. He, like every Senator recognizing many vulnerabilities in the treaty, is also concerned about the paramount issue of our national safety and security. In speaking out forthrightly, he has served the Nation's best interest. In fact, all the voices of doubt and opposition have been articulate and responsible. They bespeak the convictions of dedicated patriots. One may disagree with their final judgment—as I do—but their sense of high obligation cannot be faulted. I pay them sincere and grateful tribute.

But beyond all else, Mr. President, my decision has been shaped—my thoughts supported and sustained—by the most important of all the participants in the debate: the American people. Never, in my years of public service, has such an

outpouring of thoughtful, reasoned letters reached my desk as those relating to the issue before us. About half favor ratification; about half oppose it; but all of them reflect, in every considered word, the same deep concern.

Taken together, they have helped to cut through the infinite complexities of this issue to what is simple and essential. The writers of these letters seek a just peace and, more particularly, desire an end to the continued contamination of the atmosphere by radioactive debris. That the menace to future generations is yet unknown serves merely to heighten the sense of dread. But these letters both for and against express, at the same time, a second theme: a practical reliance on a strong right arm of national defense—powerful and ready.

On this issue, the prerequisites of public policy correspond to the American character itself: a surefooted idealism guided by practical and prudent commonsense.

This is the precise balance that I have tried to strike in my own thinking. It has not been easy. Ease of mind craves certainties. And in this matter there are many uncertainties. The effect of the treaty on weapons development, on maintaining our present superiorities, on closing existing gaps, on the peaceful uses of nuclear explosions, on the progressive expansion of human knowledge itself—in all these vital areas of concern, unequivocal assurances are not forthcoming. There are only questions and doubts, only tentative and limited judgments, virtually all of which predated initialling of this treaty, and none of which are solved or made final by it.

INITIAL MISGIVINGS ON TWO KEY POINTS

When the treaty was first submitted, this Senator's preliminary study led to grave doubts on two key points which I publicly expressed at that time.

The first was this: In the event of a major nation breaking the treaty, whether we would be bound to wait out the 3 months before being freed from the terms of that document. During the hearings and in the President's letter it was made clear that in case the Soviet Union conducted tests in violation of the treaty, these United States retained the right to resume testing forthwith. It is also pledged that this country will maintain a posture of constant readiness for such resumption of testing.

The second point upon which this Senator declared keen misgivings was the same as that raised by former President Eisenhower: Does the treaty impose any inhibition on the use of nuclear weapons by us in case of war or aggression against us or any of our allies? The answer was a clear "No," clear to the Senate, clear to the American people, and perhaps most important of all, clear to the Soviet Union. This clarity was expressed in point 4 of President Kennedy's letter by his statement that "the treaty in no way limits the authority of the Commander in Chief to use nuclear weapons for the defense of the United States and its allies, if a situation should develop requiring such a grave decision."

Thus, the essential interpretations applied to each of these two points are now

a part of the legislative history of the treaty. They are a part of the formal record. They are now in every practical sense a part of the substance of the treaty. On both scores, therefore, my initial concern has been relieved.

PRESIDENT KENNEDY'S EIGHT POINTS OF ASSURANCE

Each of the eight points set out in President Kennedy's September 10 letter addressed to the majority and minority leaders of the Senate, are likewise a part of the legislative history and of the formal record. They clear up a great many questions and objections placed on this subject. Mr. President, I ask unanimous consent that the text of these eight points contained in that letter be printed at this point in the RECORD.

There being no objection, the excerpt from the letter was ordered to be printed in the RECORD, as follows:

1. Underground nuclear testing, which is permitted under the treaty, will be vigorously and diligently carried forward, and the equipment, facilities, personnel, and funds necessary for that purpose will be provided. As the Senate knows, such testing is now going on. While we must all hope that at some future time a more comprehensive treaty may become possible by changes in the policies of other nations, until that time our underground testing program will continue.

2. The United States will maintain a posture of readiness to resume testing in the environments prohibited by the present treaty, and it will take all the necessary steps to safeguard our national security in the event that there should be an abrogation or violation of any treaty provision. In particular, the United States retains the right to resume atmospheric testing forthwith—if the Soviet Union should conduct tests in violation of the treaty.

3. Our facilities for the detection of possible violations of this treaty will be expanded and improved as required to increase our assurance against clandestine violation by others.

4. In response to the suggestion made by President Eisenhower to the Foreign Relations Committee on August 23, 1963, and in conformity with the opinion of the legal adviser of the Department of State, set forth in the report of the Committee on Foreign Relations, I am glad to emphasize again that the treaty in no way limits the authority of the Commander in Chief to use nuclear weapons for the defense of the United States and its allies, if a situation should develop requiring such a grave decision. Any decision to use such weapons would be made by the United States in accordance with its constitutional processes and would in no way be affected by the terms of the nuclear test ban treaty.

5. While the abnormal and dangerous presence of Soviet military personnel in the neighboring island of Cuba is not a matter which can be dealt with through the instrumentality of this treaty, I am able to assure the Senate that if that unhappy island should be used either directly or indirectly to circumvent or nullify this treaty, the United States will take all necessary action in response.

6. The treaty in no way changes the status of the authorities in East Germany. As the Secretary of State has made clear, "We do not recognize, and we do not intend to recognize, the Soviet occupation zone of East Germany as a state or as an entity possessing national sovereignty, or to recognize the local authorities as a government. Those authorities cannot alter these facts by the act of subscribing to the test ban treaty."

7. This Government will maintain strong weapons laboratories in a vigorous program of weapons development, in order to insure that the United States will continue to have in the future a strength fully adequate for an effective national defense. In particular, as the Secretary of Defense has made clear, we will maintain strategic forces fully insuring that this Nation will continue to be in a position to destroy any aggressor, even after absorbing a first strike by a surprise attack.

8. The United States will diligently pursue its programs for the further development of nuclear explosives for peaceful purposes by underground tests within the terms of the treaty, and as and when such developments make possible constructive uses of atmospheric nuclear explosions for peaceful purposes, the United States will seek international agreement under the treaty to permit such explosions.

Mr. HRUSKA. Mr. President, it is plain that these assurances are stated in an "unqualified and unequivocal" fashion. My reliance upon them is implicit in their being made sincerely and with the President's firm determination to follow through unswervingly. It is to be hoped that he will be more steadfast and undeterred in this instance than he has been in some other areas of foreign policy in which he has engaged, but which he has not been able to bring to successful conclusion.

U.S.S.R. AS CHAMPION TREATY BREAKER

Many of those speaking to the matter of ratification of this treaty have pointed out that we cannot trust the Soviet Union to abide by its terms. This Senator is in full agreement with that view. The U.S.S.R. on innumerable occasions has proven itself utterly incapable to abide by treaties it has undertaken.

If this treaty were dependent upon Soviet good faith, then I would vigorously oppose it; I would vote against it in that case. But after careful and lengthy consideration I am persuaded that the treaty does not depend upon trusting the Russians. This is so because of the safeguards provided in the President's letters, and our ability to implement them.

In fact, my own expectation is that sooner or later the Soviet's abrogation of the treaty in a way not provided by its terms, will terminate its tenure. All past history counsels us to anticipate such violation. Being thus forewarned, we are forearmed. All text of Communist doctrine, put us on clear warning that according to the perverse course of Communist thinking, no treaty or international obligation can ever take precedence over the imperatives of world Communist imperialism. They hold that those things alone are good which advance the goals of the so-called Socialist commonwealth. If a treaty solemnly signed becomes burdensome or undesirable, the obligations contained in it are forthwith disregarded and not observed.

In 1955, the Senate Subcommittee on Internal Security, in Senate Document No. 85, published a study entitled "Soviet Political Agreements and Results." Nearly a thousand treaties and agreements, both bilateral and multilateral, entered into by the U.S.S.R. with countries all over the world were examined.

The Senator from Mississippi [Mr. EASTLAND], chairman of the subcommittee, wrote in the preface:

The staff found that in the 38 short years since the Soviet Union came into existence, its Government had broken its word to virtually every country to which it ever gave a signed promise * * * it keeps no international promises at all unless doing so is clearly advantageous to the Soviet Union. I seriously doubt whether during the whole history of civilization any great nation has ever made as perfidious a record as this in so short a time.

In fact, treatybreaking has been an instrument of national policy with the U.S.S.R. since it came into existence. Bainbridge Colby, who was President Woodrow Wilson's Secretary of State, declared:

The responsible leaders of the regime have frequently openly boasted that they are willing to sign agreements and undertakings with foreign powers while not having the slightest intention of observing such undertakings or carrying out such agreements.

As long ago as 1919 one of Lenin's lieutenants, Zinoviev stated:

We are willing to sign an unfavorable peace. * * * It would only mean that we should put no trust whatever in the piece of paper we should sign. We shall use the breathing space so obtained in order to gather our strength so that the mere continued existence of our Government would keep up with the worldwide propaganda which Soviet Russia has been carrying on for more than a year.

Later this was updated by Joseph Stalin who put the Communist diplomatic philosophy even more bluntly, and in this fashion:

Words must have no relations to actions * * * otherwise what kind of diplomacy is it? Words are one thing, actions another. Good words are a mask for concealment of bad deeds. Sincere diplomacy is no more possible than dry water or wooden iron.

Senate Document No. 85 of the 84th Congress was brought up to date in Senate Document No. 125 in the year 1959. When the treaty now before us was initiated, this Senator requested Chairman EASTLAND of the subcommittee to have that second printing to be brought up to date, which was done.

This 1963 "Supplement No. 1" shows the U.S.S.R. record of perfidy in the matter of treaties is consistent with the 38 years of broken promises reported in Senate Document No. 85.

Quite often we hear of "a new spirit" which comes about over the U.S.S.R. So it is "the spirit of Geneva" in 1955; or the "spirit of Camp David" at a later time, and so on. These spirits are supposed to denote a change of heart, a new direction, a mellowing, or a maturing to a point where there are evidences that the U.S.S.R. wants to become a respectable, law-abiding member of the family of nations.

Such thoughts and hopes have been expressed here on the floor of the Senate during this current debate.

In truth and in fact, however, there is no such change. There has always been and there is right now a steadfast resolution and obsession in the minds and in the program of the Soviets. It

is geared to the eventual domination by the Communists of the entire world.

Chairman EASTLAND in his foreword to Senate Document No. 125 of 1959 stated:

Communism is not an evil thing only because it has been controlled by evil men since it first rose to power in 1917.

It is organically evil. You must renounce bourgeois morality, you must become an evil man before you can become a good Communist. You must be a liar, a cheat, and probably a spy, before you can represent a Communist nation in international diplomacy. You must have no more regard for honor when you sign an agreement on behalf of your country than a forger does when he puts a name on a check.

In 1958, the book "Masters of Deceit" was published. Its author is J. Edgar Hoover, widely considered as the foremost authority upon the subject of communism—its nature and its ways. Here is a declaration on the point which we are now considering, taken from his book:

The Red Fascists have long followed the practice of making use of democratic liberties: Elections, lawful adjudication and propaganda and free speech, press and assembly. Their basic premise: reap every advantage possible. However, if it will help, don't hesitate to use illegal methods, such as underground operations, terrorism, espionage, sabotage, lying, cheating. "We have never rejected terror on principle, nor can we do so. Terror is a form of military operation that may be usefully applied," wrote Lenin. Morality is strictly a bourgeois device. To the Communists everything that promotes the revolution is moral, legal, and beautiful.

Many people are confused by the party's abrupt twists and turns, such as denouncing the United States as an imperialist nation, from 1939 to 1941. Then overnight, after Russia's entrance into the war, hailing America as a great ally. Communists often look like frightened rabbits chasing back and forth.

But in reality these changes in the party line are merely shifting tactics all designed to promote the ultimate goal of world revolution. They are not changes in heart.

In their splendid book, entitled "What We Must Know About Communism," authors Harry and Bonaro Overstreet state in regard to Communist doctrine:

As for treaties signed and broken, we must again take stock of a basic difference of viewpoint. Having signed these treaties in good faith, we feel that the Communists, by violating them, have clearly manifested bad faith. But they have never conceived of good faith as possible between Communists and non-Communists. Bad faith, therefore, is an equal impossibility. The signing of a treaty across the division line prescribed by the Marxist-Leninist aversion of the class struggle is an act of expediency. The breaking of it is also precisely that—and nothing more.

Many more citations and examples could be cited. Those which have been set out should be quite conclusive in their own right. With most of the people of America they are reminders and refreshers of what the Nation has long been aware.

This Senator has gone into this phase of the unreliability of the U.S.S.R. in the field of treaties to make certain without fail that the Senate in voting ratification of this treaty has been thoroughly and completely aware of untrustworthiness of one of the major signers of this historic document,

I repeat, this record of perfidy leads me to one overriding conclusion: Were the test ban treaty dependent, in any degree, on Soviet good faith—if it were contingent upon our trusting the Soviets—then I would flatly oppose it. But we know that it is not. We have the testimony of our military and scientific chiefs, the Secretaries of State and Defense, and the assurance of the President, to the effect that our national safety and security rest on two foundations, and two alone: Our effective detection systems and our state of instant readiness, over and above our basic posture of massive military power.

I do not question the sincerity of these assurances. I accept them. I take pride and comfort from such evidence of American might, and of the skills and devotion of our Nation's scientific personnel. More pride perhaps—and certainly more confidence—than was shown by the President himself as recently as March 2, 1962. These were his words to the Nation on that occasion:

But in actual practice, particularly in a society of free choice, we cannot keep top-flight scientists concentrating on the preparation of an experiment which may or may not take place on an uncertain date in the undefined future. Nor can large technical laboratories be kept fully alert on a stand-by basis waiting for some other nation to break an agreement. This is not merely difficult or inconvenient—we have explored this alternative thoroughly, and found it impossible of execution.

Let me stress that final sentence: "We have explored this alternative thoroughly, and found it impossible of execution." And as for the extent to which this treaty or an unsuspected test ban can be truly and effectively self-policing, these were the President's views as expressed at his news conference of February 7, 1962:

We will support the passage of an effective treaty which provides for effective inspection, but we cannot take less in view of the fact of our experience of the past months where it takes us many months to prepare for tests in the atmosphere. The Soviet Union prepares in secret. Unless we have adequate protection against a repetition of that incident, any such test agreement obviously would be extremely vulnerable.

Do we now, as evidently we did not then, have adequate protection? Have the basic conditions, the irreducible essentials of national security, somehow changed? Are the two situations in some critical way incomparable—as some administration spokesmen have tried, with more bravery than logic, to argue? I am not persuaded by these attempts to evade the embarrassing consequences of their own previous supersalesmanship. Nor am I persuaded, today, by the new version of the hard sell by which some of these same partisans are attempting to minimize the risks imbedded in the treaty before us.

This is, indeed, no time for salesmanship of any kind. It is, rather, a time for cool reason and hard logic. This is what I have looked for in the considered testimony of the Joint Chiefs—for example, in the official brief filed at the behest of the junior Senator from the State of Washington [Mr. JACKSON],

specifying the criteria for a truly ready alert and for a state of instant preparedness to resume profitable tests. Reason, logic, and the judicious balancing of risks is what I have looked for, Mr. President. And this is what I have found in the official record—sufficient, in my judgment, to deem these risks acceptable.

But from this disturbing evidence of contradictions and of uncertainties, in the President's own words, let us draw the appropriate conclusions. No one who is sincerely dedicated to this Nation's enduring interests—no one, surely, in this Chamber—can take pleasure simply in recitations which may be embarrassing to the administration's highest officers. But let no one shrink from the duty of holding them to their words and their solemn assurances. Under the terms and the inherent risks of this treaty, let these officials be on notice: They—no less than the Soviets—are on trial.

They have given us assurances that our detection system will be rigorously maintained and constantly improved; that all the arts and skills of underground testing, for both military and peaceful purposes, will be developed to the limits of our resources; that our experimental facilities and our scientific manpower will be sustained in a state of maximum capability and instant readiness. And so I repeat and reemphasize: By making these assurances, they have entered into a solemn pact with the American people on the vital question of our national security. The Nation will hold them to their word.

This, finally, has been the lasting strength of the "historic and constructive debate" for which the President originally called. Never has this Senate, this Congress, or this Nation been more fully in a state of alert. Never have the risks of a limited test ban been more widely or more deeply understood. We may once again fall victim to duplicity—but not soon again to our own delusions.

And because we now comprehend the risks, we may judge them to be—on balance—acceptable.

Without deluding ourselves as to the purposes other nations might have in signing this limited treaty, it is nevertheless clear that our support of it will assure, at least for a limited time, a reduction of radioactive contamination of the seas, the atmosphere and outer space.

Should we withhold our approval, the likelihood of continued atomic testing seems inevitable. It may yet be resumed for reasons of compelling national security, but mankind is due a breather. This is an opportunity, in other words, to test intentions rather than bombs as we keep our powder dry.

Thus, in ratifying this limited treaty, we do hope that we may finally have embarked on the perilous road toward a just and lasting peace. No one can say in certainty that we have done so. I do not. But I do say that we venture forth in the name of all that is most worthy in the human spirit. Sustained by that conviction, I am prepared to support the treaty.

THE RUSSELL UNDERSTANDING

Having made that determination, Mr. President, we nonetheless must take all prudent steps to reduce any risks which may be incurred.

One very practical way in which we can reduce the risks is to approve the proposal of the Senator from Georgia [Mr. RUSSELL] which would reserve to the Senate the right to ratify or reject future alterations in the treaty.

This is simply a reasonable precaution to restate, reaffirm, and protect the constitutional right of the Senate to advise and consent to international treaties. It would reaffirm the national policy of having a branch of the Congress, representing the people, pass on the merits of amendments to the treaty after due and widely publicized disclosure and debate. It would be a warning against the use of executive agreements in which the people through the Senate have no voice and sometimes no knowledge till long after the fact.

Those who oppose the Russell amendment protest that it is not necessary; that the Secretary of State has testified that any amendment will be subject to Senate approval. If that is the case, Mr. President, how can they object to having it spelled out? Surely it can do no harm. And it would have the simple virtue of saying what we mean and what the fact is.

As the Senator from Georgia has pointed out, his language is identical to that in the International Atomic Energy Act. It was deemed important then; surely it is equally important now.

It is my hope, Mr. President, that the Senate will support the Russell understanding. Armed with such an understanding, the treaty would be significantly strengthened.

"A FIRST STEP TOWARD PEACE"

Often during this current debate reference has been made to this treaty as a first step toward peace. However, repeatedly our attention has been called to the fact that it is not a widely encompassing measure; that not too much is covered by it nor can too much be expected from it. After all, it is very limited in its scope. Nevertheless, this first step would bring about benefit to the world by not having the air polluted with radioactive poison, no matter how brief the respite may be.

But in ratifying this treaty, the Senate endorses only the content of this treaty and nothing more. It surely does not commit itself to approve further steps which the President may make.

All of us can hope that the treaty is indeed a first step toward peace. But most emphatically it does not follow that the treaty is a first step toward approval of all other treaties and foreign policy changes which the President may see fit to lay before the Congress and the country.

This Senator will most emphatically hold to this foregoing thought. He will consider himself totally free to consider any amendment of the present treaty or any sequel to it altogether clear and separately from their ratification of the treaty.

GAINS OUTWEIGH RISKS

Mr. President, I have attempted to spell out as carefully as I can not only the reasons for voting for the treaty, but the risks and dangers which accompany such a decision.

From the time the treaty was initiated at Moscow, it has been apparent that the problem confronting the Senate was to weigh the advantages against the risks and thus arrive at its decision.

This has been done in the kind of free and open discussion which characterizes our system of government. All points of view have been heard. The result is clear: the advantages, not only to our Nation, but to the world, justify our ratification. We can do no less.

Mr. BYRD of Virginia. Mr. President, no man wants peace in the world more than I do. I abhor war. I know the horrible destructiveness of nuclear conflict. My highest purpose in the Senate of the United States is to preserve the sovereignty and the system of this Nation.

I attribute the same motives to all Members of Congress. I am aware of the proposed treaty's objectives as they have been stated by the President. The treaty itself says the purpose is to ban nuclear tests in the atmosphere, outer space and underwater.

I have never given a matter before the Senate more thoughtful study and consideration than I have given this treaty. I wish I could vote for its ratification in the belief that it would be in the best interest of the country.

But I do not believe entering into such a treaty—as it stands—with the Soviet Government would serve our national security. I am fearful that it will weaken, if not undermine, our defense. I cannot conscientiously consent to ratification as it is proposed.

Before reaching this decision I listened to the testimony, participated in the discussions, and studied the hearing transcripts; and I have called on my 30 years of experience in the Senate observing world affairs and our position in them.

Through these years I have served on the Armed Services Committee and its predecessor, the Naval Affairs Committee; I helped write our atomic energy control legislation; and I was an original member of the Joint Committee on Atomic Energy.

It is contended that the proposed treaty is a "small step" toward world peace and relieving cold war tensions, and perhaps toward disarmament. From experience I have learned that proposals in the name of peace do not always lead to peace.

We have Neville Chamberlain's "umbrella" experience with Hitler in the prelude to World War II, if a reminder is needed. The proposed treaty may tend temporarily to lessen international tensions, but the vital question is its ultimate effect on our security.

Ratification of the treaty in its present form would give me great concern. The Soviet Union would be one of three principal parties to it. We know that destruction of our system is a primary requirement in the Soviet aim for world conquest.

Soviet Chairman Khrushchev, himself, has said he intends to "bury" us. There is just reason to assume that the Russians think this treaty will work to their advantage, or that it can be turned to that end. Why would they be interested in it otherwise?

There is nothing in Soviet history which would serve as a basis for faith that the Kremlin would enter into a treaty with us at this time and keep it if they did not think it would serve their objectives to our disadvantage.

Secretary of State Dean Rusk, testifying on the treaty proposal, before the Senate Foreign Relations Committee, August 12, 1963—page 18 of the hearings—said:

We have no basis yet for assuming a fundamental change in Soviet objectives.

We can expect Soviet Russia to disregard the treaty when breaching it would serve Soviet purposes. Former President Truman has told us that the Soviet Union has violated 50 of the last 52 or 53 treaties it has entered into.

A State Department memorandum on this subject, dated August 22, 1963, cited conventions of convenience—such as the Universal Postal Convention—to which the Russians are adhering, but beyond these, it said:

It is perfectly clear that the Soviet Union has violated a large number of major international agreements and treaties. Their record is well known.

We have already been victimized by the Soviets under one nuclear test ban, and there is reason to suspect that our position with respect to nuclear weapons, as compared with the Russian position, suffered. This fact cannot be overlooked.

Under unilateral "statements of intent" the United States and Great Britain entered into a so-called "moratorium" with the Soviets in 1958. As might have been expected the Soviets exploited the moratorium while we and the British honored it.

For more than 2 years the Russians used the moratorium secretly to build up their experimental and test devices, and when they were ready, in September 1961, they exploded them—the tri-party moratorium notwithstanding.

On March 2, 1962—only about 18 months ago—President Kennedy, in a nationwide broadcast—CONGRESSIONAL RECORD, volume 108, part 3, page 3427—said:

On September 1 of last year, while the United States and the United Kingdom were negotiating in good faith at Geneva, the Soviet Union callously broke its moratorium with a 2-month series of more than 40 nuclear tests. Preparations for these tests had been secretly underway for many months. Accompanied by new threats and new tactics of terror, these tests—conducted mostly in the atmosphere—represented a major Soviet effort to put nuclear weapons back into the arms race.

Many of their tests were aimed at improving their defenses against missiles—others were proof tests, trying out existing weapons systems—but over one-half emphasized the development of new weapons, particularly those of greater explosive power.

from carrying out tests—without onsite inspection—which could be used for weapons development but hidden under the guise of peaceful uses experiments.

Because of this lack of trust, our negotiators placed language in this treaty that inhibited the Plowshare program. How much has that program been inhibited? This question bothered me and I asked Dr. Glenn Seaborg, Chairman of the Atomic Energy Commission, about it. He answered by noting that the treaty would not inhibit the peaceful uses program in the fields of nuclear power, nuclear energy for propulsion and the use of isotopes in medicine, industry, and research.

As for the field of nuclear explosions, Dr. Seaborg said that within the United States certain excavations could be undertaken along with work in the areas of mining and development of underground water resources.

Larger projects, such as canal and harbor building and mountain moving, Dr. Seaborg noted, depend upon development of nuclear explosives and associated excavation technology which were not presently available. It is my understanding that the administration foresees needing the next few years to develop our capabilities in this large scale excavation area and then plans to approach other treaty signatories on a project-by-project basis as each one becomes feasible. By then, perhaps, if the treaty has been adhered to, we may have built up enough trust between the Soviets and ourselves that they will permit us to observe their peaceful explosion experiments and we—as we have offered in the past—will invite them to observe ours.

It had been my hope that the approval of this test ban treaty would give us some assurance of a reduction in arms and armament. The Secretary of State and members of the Defense Department testified that even though the treaty is approved, we cannot expect any immediate reduction in our defense efforts. As a matter of fact, it could well increase, instead of decrease, our military expenditures for years to come.

This matter was forcibly called to the attention of the committee in the testimony of our Secretary of State, Mr. Rusk, which appears on page 29 of the hearings. On direct interrogation by the Senator from Alabama [Mr. SPARKMAN], the Secretary stated:

This treaty itself does not reduce weapons in being or prevent their further production.

This treaty is aimed only at the question of nuclear explosions. I regret myself that it has not been possible to make greater headway in some actual physical disarmament measures consistent with our own security.

But this treaty is not a step in that direction—this treaty is not itself dealing with that problem. It may turn out to be one small step that opens up some possibilities in this field but that has not yet become apparent.

Senator SPARKMAN. It is a treaty of hope so far that is concerned.

Secretary RUSK. So far as actual disarmament is concerned, it is a treaty of hope. It is a treaty of a fact insofar as explosions in those three environments are concerned.

Mr. President, the distinguished minority leader [Mr. DIRKSEN], in his impressive statement in support of this treaty last week, pointed out that our party went to the electors in 1960 with a platform that included the statement:

We advocate an early agreement by all nations to forego nuclear tests in the atmosphere, and the suspension of other tests as verification techniques permit. We support the President in any decision he may make to reevaluate the question of resumption of underground nuclear explosions testing, if the Geneva Conference fails to produce a satisfactory agreement.

This is not a partisan matter but I cannot help noting the treaty before the Senate meets almost exactly the 1960 pledge of our party, and in fact follows initiatives begun by President Eisenhower.

As a member of the Senate Foreign Relations Committee, I attended practically every hearing on the proposed nuclear test ban treaty. These hearings lasted 3 weeks and contained volumes of testimony which was given in open and executive sessions.

After hearing the testimony, I have reached the conclusion that it is in the interests of our Nation and the peace of the world to vote for the ratification of this treaty. This had to be a choice not between right and wrong, but rather a choice of the greatest gains toward world peace and the fewest risks to our national security.

Mr. GOLDWATER. Mr. President, after reviewing the remarks made in this Chamber, and the testimony regarding the proposed limited nuclear test ban treaty, I am impressed by three arguments—one in its favor, two in opposition.

In favor of it, after all is said and done, is a hope, usually described as a faint glimmer, that this may be the first step toward easing tension in the world. It is difficult, if not impossible, to argue with a hope. It is an emotional thing; and in its soft and gentle glow, arguments appear harsh. The more fragile an illusion, the more rude must seem the attempts to shatter it.

I have warned, and will continue to warn, that nuclear weapons are not the cause of tension in this world; that if all were to disappear magically overnight, the tension would remain, so long as world communism remains dedicated to aggression and obsessed by its irrational vision of man as a mere cog in the machine of history.

But hope heeds only itself. How does one remind hope that, hitherto, on-site inspection has been the qualification of our trust of any arms control scheme? How does one remind hope that the technology of remote detection still has not developed fully to a point where it can replace such inspection? Or how does one tell hope, sprung from fear, that fallout is less a present threat than smog and fumes of everyday life? If we say these things, hope—revulsed—shrinks from our harsh words. One who says these things stands alone, a sad, somber, and unwelcome guest in a house of celebrants.

We are, apparently, well past arguing with hope. The future will shatter the hope and will sober the celebrants. But we must wait.

For my part, and the part of the other few who must heed other voices in their conscience, there is only the time now to say why we will vote, as we must, to oppose approval of this treaty. I perceive two reasons, basically; and I have based my decisions upon one.

First, there is the reason that this treaty is a political ambush, baited by the necessity of the Soviet to ease the many pressures upon its tyranny. This has been discussed on this floor. The argument impresses me; and I share, with those who have made it, bewilderment at why freedom is aided by putting salve on the wounds of tyranny. But that is not the argument which, alone, moves me to vote as I must and as I will.

I will vote "no," because of how I read history and perceive the future. I see in our history, in this nuclear age, that what peace we have had has been possible because of our strength. I see in our history the clear course of Soviet aggressions and breaches of the peace: They have poured through gaps in our strength. They have been stopped when those gaps closed or were precluded when our guard remained high.

I see no change in the future until or unless the objectives of communism, not merely their weapons, change. And not even hope has spoken to us so far of a change in those objectives. Rather, all say that the objectives remain unchanged. But hope, it seems, can hear that truth and still proceed, whistling past the graveyard of experience.

Thus, if strength is the shield of peace and weakness the way to war and defeat, it is the impact upon our strength that concerns me most.

What is that impact? Have we not heard assurance after assurance that our strength will be upheld under this treaty? We have, indeed.

But assurances are not facts, promises are not performances and I do not feel that freedom's strength, in a time of freedom's peril, can be armored by either. Such strength is a matter of here and now, not of "if and when." Real hope must be founded upon real strength.

There is a catalog that has been laid before us of the price in strength we will pay under this treaty. Have we seen a similar catalog of a Soviet price? Hope may see such a catalog; reality does not.

The major heading of this catalog of America's price, America's strength, is that the treaty, perhaps gently but nonetheless firmly, closes the door of knowledge.

Now the Senate must pardon me for speaking of real weapons in the real world. As I have said, the words sound harsh in the glow of hope. Truth often does.

There has been work underway in our laboratories toward the design, development and test of a device with a yield of 80 to 100 megatons. Now the door will close on that, if this treaty is ratified. Does it close on similar knowledge

for the Soviets? We only know that they have tested—tested, mind you, not just conjectured—devices with yields approaching that range, and we have not, and we will not under this treaty.

We have never tested fully the stamina of our hardened missile emplacements. The treaty will close the door against such tests. Will it close such a door for the Soviets? We only know that there is evidence that they have tested—have tested, not theorized—hardened structures.

Not knowing whether our missile emplacements or missile sites will withstand a severe blast, how can we be sure of our great deterrent, which is a second-strike capability? How can we even be sure that any missiles will leave their sites with the lack of knowledge that we have of the environments to which they will be subjected?

Through the eyes of hope, of course, we see tests of major weapons and systems as unnecessary. Hope says that what we have is enough, that these high-yield devices are of minimum military efficiency. Lapsing only for a moment into the language of harsh fact, it is asked if several 20-megaton devices are not far better than one 60- or 100-megaton device. Again, the answer must be along the horizons of knowledge and not along the edges of the statisticians ledger sheet.

It is the knowledge of the effect, the environmental effect, of high-yield explosions, the sort we have not tested and will not test under this treaty—it is in such knowledge that we will be weakened by this treaty.

Prompt gamma pulses from high-yield explosions are known devastatingly to distort electronic circuitry.

We know very little about that subject. We know that megaton yields of which the enemy is capable could render unusable our entire communications system. It would even render unusable our entire domestic electric systems at astonishingly high distances. Since my colleagues have not been too well informed in that field, at the end of my remarks I shall ask consent to have printed in the RECORD some information that I have gathered on that subject, but I shall not offer it now.

Interference with electronic triggers is an area of grave concern. So is the effect upon missile guidance systems. So grave is the concern, that our military men must ask if the Soviets do not have the capability, with the knowledge gained in their exclusive high-yield tests, of thoroughly disrupting our retaliatory missile systems. They must ask if their systems can survive the melt-down of fissionable materials by neutron impact, the effect of X-rays, the disruption of communications and radar blackout from beta rays, from gamma rays, from fire-ball effects.

Ask the men who must man the missiles and they say tests are needed. Ask if the Soviets have not already tested in this area and we find that we do not know—but there is ample evidence upon which to presume that they have.

Ask the man upon whose command rests 90 percent of the strategic striking power of this Nation: ask General Power

the impact of this treaty upon the strength about which he knows as much as any man. We have all heard his answer. This treaty is not in the national interest.

Ask the man whose job it has been to work with the most advanced weapons system: ask General Schriever the impact of this treaty. We all have heard his answer. He felt he could protect his country better without the treaty.

And what of the Joint Chiefs of Staff altogether? Remember now, if you will, only that they finally supported the treaty because of many safeguards, many promises, and political advantages of which others had spoken. But remember every other day of your life, every day that the time bomb of Communist treachery ticks closer to detonation, that they spoke and spoke clearly of military disadvantages under this treaty.

Pray God that we do not have to remember that under attack, weakened and unprepared.

Remember also their warning that a state of euphoria would be the most deadly consequence of the treaty. Remember that as we now officially study increased trade with the Soviets. Remember it when the next steps are taken, the pacts proposed, the agreements signed. It is not too late to remember those things now, but other, more popular tunes seem to dance in the air.

I shall not recite the page after page of cataloging of the U.S. price in strength that this treaty exacts. Senators know of them; they have heard or read them. They can restudy them. Let me just sum up the price: Under this treaty we close the door on sure knowledge of the survivability of our second-strike capability, the very capability which, until now, has been the shield of peace in this world. We halt the search for the widest span of nuclear know-how at a point where the total test yields of the Soviet are a full third greater than our own.

If I had no knowledge of weapons and of the enemy, then I would wish also to vote for this treaty and share the brief illusion that it brings. But I have lived too long with reality, too long with the men who are dedicated to our defense, too long with the facts of the enemy's dedication, to discard all that I am and all that I know.

I will vote against this treaty because it will erode our military strength. I will vote against this treaty because it preserves the enemy's advances in high-yield weaponry while freeing them to overtake our lead in low-yield research. We pay a price; they do not.

I do not vote against the hope of peace, but only against the illusion of it. I do not vote for war, but for the strength to prevent it.

I have been told, as have others, I am sure, that to vote against this treaty is to commit political suicide.

I will vote against this treaty because in my heart, mind, soul and conscience, I feel it detrimental to the strength of my country.

If it means political suicide to vote for my country and against this treaty, then I commit it gladly. It is not my future

that concerns me. It is my country—and what my conscience tells me is how best I may serve it.

Mr. President, I ask unanimous consent that the first 7 pages of the introduction to a paper prepared by Dr. V. W. Vodicka, technical director, Joslyn Electronic Systems Division, and John A. Kuypers, of Stanford University, may be printed in the RECORD following my remarks.

There being no objection, the excerpt was ordered to be printed in the RECORD, as follows:

The immediate electromagnetic effects of an atomic explosion are massive and diverse. These effects can wipe out critical weapons and communications systems in a few seconds time although the same facilities may survive in the so-called conventional part of the attack environment.

There is more to a nuclear explosion than a spectacular visual display, ground and atmospheric shock waves, heat, and atomic radiation. These are only part of the nuclear attack environment.

Some of the electromagnetic effects (viz., Argus) are trans-hemispheric. All are relatively instantaneous. Some effects are more localized, with a facility damage radii of 100 to 200 miles.

Our strategic and tactical defense/offense systems are required to survive in periods of nuclear attack. Some of our facilities have been designed to withstand tremendous physical shock and radiation levels. As now implemented, these same systems (missiles, ground electronics, command/control and communications) may not dependably survive the electromagnetic nuclear environment.

Nuclear electromagnetic effects have been noted since the advent of nuclear explosion testing. Overwhelming verification of their existence and scope has been built up by correlation of shot times (most accurately defined in foreign technical papers) with concurrent working system outages and damages. This correlation effort by the authors began in 1952 with notations of electromagnetic effects in the vicinity (200 mile radius) of the test grounds.

In August 1958 the Argus test series in the South Atlantic Ocean caused dramatic and unpredicted transhemispheric electromagnetic disturbances. A low-yield shot at 200 miles altitude caused the undersea coaxial cable across the North Atlantic Ocean to intermittently fail in function. Correlated outages existed in critical defense systems at this time but were not published due to classification of facilities logs.

Soviet instrumentation of our test efforts defined our shot times to the second. The times were published in unclassified technical papers.

The effects of the Argus test series on commercial and military communications gave additional verification of the existence of highly significant nuclear electromagnetic effects. A preliminary paper on the subject was prepared in 1960 and distributed by the authors to those who should have been concerned. Since that time, much additional material has been uncovered. More effects have been defined and a good amount of quantitative data observed and derived. Foreign unclassified data continues to be a major source of information. Our systems design and implementation remains in the horse and buggy stage with respect to nuclear electromagnetic effects.

Many tactical and strategic weapons, communications, and command systems are not hard electrically. These systems as now implemented may not survive electronically to the same degree that they will survive mechanically. Catastrophic electrical and electronic failures can be expected in most mili-

tary facilities which are combined with commercial facilities as now installed to a radius from ground zero as follows if not properly protected:

	Miles
1 MT fusion, low altitude.....	20
10 MT fusion, low altitude.....	75
50 MT fusion, low altitude.....	120

The catastrophic failures are defined as: Vaporization and explosion of electrical conductors (power distribution and communications), equipment component burn out (especially solid state devices) and massive insulation failures due to both conductor overheating and electrical stress (over voltage) and ionization of dielectric.

Lesser systems failures can be expected outside of the radii specified above. Both calculations and actual experience show that our systems are vulnerable to a lower order of damage in this extended area. These troubles are on the order of: component failure, blown fuses, damaged or blown circuit breakers, grounded protectors, computer confusion caused by unexpected ground loops, transient pulses, and unprogrammed events and instructions, disturbance of data transmission facilities. Disruption of radio frequency transmission paths has been partially recognized but unduly minimized.

Systems troubles are created daily by natural and manmade electromagnetic phenomena. The natural effects include lightning and lesser random static discharges, aurora, magnetic storms, telluric (earth) current pattern changes. The manmade effects include power systems switching transients, and electrical interferences caused by arc welding, electric shoe arcing, and electrical power faults which at times cause radial local ground potential changes.

The electromagnetic effects associated with fusion activity have been partially sorted out. The list includes:

1. Argus effect: This aurora-like mechanism has been noted in every high altitude test (United States and Soviet) since August 1, 1958. This effect can create a man-made aurora at any desired location equal in electrical disturbance to any recorded sun-spot storm.

2. Electromagnetic pulse effect: This effect has demonstrated its power in every nuclear test shot.

Early low-yield fission test activity caused concurrent outages on powerlines passing the general area. Circuit breakers on main feed lines opened due to over voltage conditions induced at distances in excess of 80 miles. This extremely powerful effect has been observed from the beginning of nuclear test activities. It contributed to most of the instrumentation failures experienced in early test efforts. This effect continues to cause instrumentation trouble because it is neither recognized nor understood by many instrumentation systems design engineers. The effect causes potential changes on conductors in excess of 10,000 volts with rise times in the order of 20 to 100 nanoseconds and durations of 1 second or more. This affects buried cable in the vicinity equally with any aerial facilities that may be left standing. Insulation breakdown from voltages, several orders in excess of design stress are followed by extremely high currents. The result is conductor burnout in the immediate vicinity and high voltages passed down the line to the distant terminal or other electrical/electronic facility.

3. Neutron flux effect: This effect is often masked by effect No. 2, since it takes place relatively close to the nuclear activity. The end result of this mechanism is the development of abnormal voltages in electrical conductors accompanied by insulation breakdown due to heat, chemical change, and electrical stress plus initiation of secondary radiation along the flux path.

4. Static discharge effect: This is similar in appearance and occurrence to lightning.

It is applicable to radio antennas and other above-ground facilities which may have survived the mechanical stresses outside of but close to a nuclear fireball. These facilities invite massive electrical discharges from the fireball edge much as a lightning rod. The currents that would be experienced are sufficient to melt the structural components and collapse the facility.

5. Radio frequency transmission effects: This area has been covered qualitatively in papers and reports by others but more quantitative data correlation work is required. This is especially true in the low frequency and ultra low frequency transmission area. Categorical statements minimizing or pointing out the absence of vulnerability of these transmission media are unrealistic. Large outages in low frequency and ultra low frequency transmission systems have been experienced in connection with nuclear testing activity and are to be reckoned with when examining systems' reliability in the nuclear environment.

The vulnerability of existing facilities (and future systems) can be reduced without resort to exotic methods. Knowledgeable application of systems design and installation fundamentals and attention to detail in interface areas is a must. Systems designers and operations personnel must be apprised of the electromagnetic effects mechanisms and quantitative results of same. Existing knowledge must be used and all known techniques brought to bear on this problem. The use of fast response, self-healing circuit protection devices will materially reduce the aforementioned damage radii. Certainly, R. & D. design of new transmission systems should proceed. Unique though not necessarily oversophisticated new systems have been proposed which are far more immune to the electromagnetic environment than the transmission techniques now used.

There is a definite need for a focal point for information regarding the various electromagnetic effects on weapons, command, and communications systems. The sources of information are diverse and not always in themselves knowledgeable as to the "practical results in working systems" aspect. The large range of sources can be realized by a perusal of the bibliography. Some of the most significant data available is from unclassified technical journals from the U.S.S.R., France, and England. Another group of sources are private industry with no government ties, and government agencies who are systems operators out of the realm of the defense effort. Definitive studies and practical analysis of electromagnetic effects versus defense systems have been urgently required since before nuclear weapons became available for use by others than the United States. As of this time there is not so much as a handbook which can be used by systems designers as an information source. The present Mil-Spec series is completely inadequate to meet the total reliability requirements of communications and weapons systems facilities. At present the Mil-Spec series does not recognize the real integrated EMP problem.

Where some of the effects are recognized but systems solutions not readily apparent, the problem is classified and withheld from personnel who must have the information in order to design systems that will accommodate the problem.

Mr. THURMOND. Mr. President, will the distinguished Senator from Arizona yield?

Mr. GOLDWATER. I yield.

Mr. THURMOND. I commend the able Senator from Arizona for his magnificent statement. The distinguished Senator from Arizona is a major general in the Air Force Reserve. In performing his duties in that capacity he has had oc-

casional to learn a great deal about missiles, rockets, bombers, and nuclear weapons. His statement today on this subject should bear great weight with the Senate. He has made a fine contribution, which I am sure will be helpful to the Senate.

Mr. GOLDWATER. I thank my distinguished friend from South Carolina, whose military knowledge I respect highly.

I implore my colleagues in the Senate to read the excerpt from the paper I have asked to have printed in the RECORD, when the RECORD becomes available tomorrow. It covers a subject we have not discussed, which is of vital interest to our survival.

As these scientists conclude, catastrophic electrical and electronic failures can be expected in most military facilities which are combined with commercial facilities.

We are not talking about a direct hit. We are talking about the electromagnetic impacts, which some scientists say can travel 1,100 miles and which some scientists agree can have an effect of 1 megaton of fusion in a low altitude burst at 20 miles. In fact, as a result of a low-yield shot at 200 miles altitude the undersea coaxial cable across the North Atlantic Ocean was caused to intermittently fail to function.

We know enough about effects to know that all modern circuitry—all circuits in radios, all circuits in radars, all circuits in inertial guidance systems, as well as the electronic triggers which cause the missiles to travel—is now in the process of being redesigned, because we do not know enough about the effects of the electromagnetic pulse to defend and protect the systems we now have.

This one item alone should cause the Senate to pause before approving this treaty, at least until a time is reached when we have an opportunity to find out how to protect our own systems.

Mr. THURMOND. Mr. President, will the Senator yield further?

Mr. GOLDWATER. I yield.

Mr. THURMOND. Is it not true that the only way we would be able to acquire the knowledge about which the Senator has spoken is by testing in the atmosphere? It is impossible to acquire that knowledge by testing underground, is it not?

Mr. GOLDWATER. We could acquire much of the knowledge by testing underground. We could study the effects of gamma rays underground.

Mr. THURMOND. We could acquire a portion of the knowledge from underground testing.

Mr. GOLDWATER. Yes. I have yet to meet a scientist who will categorically say we can acquire the information needed in this way. It cannot be said to the people of the United States, "We have a device which we guarantee will work in the atmosphere—through a nuclear environment, through gamma rays, through fireball blackout," unless it is tested in the atmosphere.

We can develop the theory. We can do a great deal of experimentation. We can do much extrapolation from underground testing. But no man can guarantee that any weapon will work without

testing it in the environment in which it must be used.

Mr. THURMOND. The weapon must be tested in the environment in which it is to be used in order to determine actually what results will be obtained.

Mr. GOLDWATER. Yes.

Mr. THURMOND. Under the treaty, if ratified, that would be impossible.

Mr. GOLDWATER. The Senator is absolutely correct. I recall that shortly after our entry into World War II we tried a torpedo which the scientists told us would end all naval warfare. We had never tested it. It did not work. We spent a long time getting the old torpedoes ready to go.

I wish it were possible for me to vote for the treaty. I should like to vote for it. Knowing the scientific and military facts of life, I think we are asking for real trouble if we ratify the treaty.

Mr. THURMOND. I know the great respect the able Senator from Arizona has for General Power. I should like to read a statement General Power made a few days ago:

In my personal opinion all sensible people in this world desire peace and freedom from a nuclear war. But there are two different theories of how to get there.

One theory is through military superiority and through deterrence, which is the philosophy of the strategy we have used. There is another one through disarmament.

I personally think the two theories are diametrically opposed. I don't see how you can arm and disarm at the same time. I have studied previous disarmament measures and in my opinion disarmament is a proven concept to get you into a war. I think history will prove that the surest way to cause a war, nuclear war or any war, is to disarm.

I wonder if the Senator from Arizona is in accord with that statement by General Power.

Mr. GOLDWATER. History would make me be in accord with it, even if I were not inclined to be. The general is absolutely correct in that statement.

Mr. MONRONEY. Mr. President, the choice we face here is not easily defined or described, but many Senators have participated in this discussion, and in going over the record I was deeply impressed with the depth of the study which the Senate has made of this treaty. It is now quite clear that the Senate will ratify this treaty by a substantial margin above the required two-thirds majority. One cannot review the many thousands of words that have been said in the Senate concerning the treaty without concluding that the decision to support it is sound.

In the simplest terms, what we face is a choice of risks. Or, to put the matter in positive terms, a choice of hopes. We cannot be sure of the benefits which this treaty offers mankind. On the other hand, we cannot be certain of the safety and security of mankind without it. With the treaty, we hope that the relentless increase in poisonous radioactivity in the atmosphere will be halted. With the treaty, we hope that the rush of nations to arm themselves with nuclear weapons which threaten annihilation of civilization will be halted, or at least slowed. With the treaty, we hope

the world can move into an era of mutual trust and confidence based on performance. Not until we see how the Soviet Union performs under this treaty will such trust and confidence in it be merited, but we can well afford the risk of a probationary period, in my opinion.

To refuse to ratify the treaty will mean an end to the long-drawn-out negotiations which we initiated in 1946 and have pressed in various conferences ever since.

Now that we have reached an agreement at long last, limited as it is, we can be sure that, if we refuse to go through with the initialed treaty, we face a prolonged period of unlimited testing, without hope of another open outer door for limiting the dangerous effects that will result.

If the limited test ban is violated, we will only face the condition we face today and for years to come without any treaty. Nations would again resume contaminating our soil and polluting the world's atmosphere and space.

This decision can and perhaps will play a vital part in changing the course of the cold war. On it certainly ride the hopes and fears of millions of the world's people, who pray for some cessation of tensions that build up in the present nuclear arms race.

There are both certainty and uncertainty about the ratification of this treaty. No treaty is foolproof or has built-in guarantees of success.

There is certainty, however, among the neutral and uncommitted nations, numbering more than a billion of the world's peoples, that this crossing of the outer threshold with a limited treaty is in their best interests. These are the innocent bystanders who know that they would suffer along with the industrial powers should a nuclear exchange take place.

They see in this pause in the acceleration toward greater and more terrible weapons a chance for a cooling off period that may—repeat may—lead to other agreements resulting in further easing of tensions among the atomic powers.

There is certainty also among the smaller but more industrialized nations, many of them our allies, who have not yet entered the field of atomic armament but who feel that they must soon make a fateful decision. This decision will tax their industrial and scientific capabilities and thrust them into the maelstrom of atomic weapons development. If they enter, they will be a part of the acceleration toward more terrifying weapons.

This proliferation of atomic power to many smaller nations, the neutral, the friendly and those who lust for power over their neighbors, raises an international danger. A worldwide atomic war could be triggered when the grave responsibility of possessing atomic weapons rests with the irresponsible. War by miscalculation or by blackmail multiplies the threat we face. If great danger lies in having these weapons in the hands of three atomic powers, it will be magnified many times when new nations acquire even a modest stockpile of weapons.

I believe it is evident that the nations who have already signed the pact are certain that it is in the best interest of

their security. It will allow them the privilege of abstaining from the arms race, and being spared the great expense and attendant dangers of entering into the atomic club.

They feel, I am sure, that the hope for negotiations is better if the possessors of such weapons are few in number, and if even these are seeking to limit the dangers inherent in the arms race.

We cannot avoid the knowledge that more than 90 nations already have subscribed to the treaty. We cannot avoid being aware that all these other nations acted with knowledge that this treaty is useless without the approval of at least 67 Members of the U.S. Senate.

The overwhelming support which the treaty has engendered around the world was clearly evident to Members of the Senate and House of Representatives who attended the 52d Conference of the Interparliamentary Union starting last week in Belgrade. Previously, the Senate's attention has been directed to news dispatches sent to this country from Belgrade emphasizing the treaty's transcendental importance in the minds of the 500 elected lawmakers, representing nearly 70 national governments, in attendance there. The U.S. delegates heard speaker after speaker praise the treaty. At every hand, day and night, we were told that the treaty offers new hope for enduring peace.

One U.S. journalist cabled to his readers:

It is evident to every Senator and Congressman attending this global gathering of parliamentarians that if the U.S. Senate turns its back on the test ban, world opinion will turn its back on the United States in agony and disappointment.

I heartily agree with this journalist's appraisal of the common viewpoint held by the delegates at Belgrade. Peace remains the great unifying motive of all mankind, and leaders of more than 90 nations have already recognized this treaty as a step in the direction of peace, or as a step backward and away from the horrible possibility of a nuclear war.

I am very much aware, however, that Members of the Senate must not let this worldwide display of fervor for the treaty to be the controlling factor in their deliberations. Instead, we must keep in mind that this phenomenal enthusiasm is the direct result of the leadership which the United States has provided along the path of peace. We must remember that this treaty was our idea in the first place, and that we are now engaged in testing the courage of our own convictions. The record of American efforts to secure a workable limitation on the testing of nuclear weapons dates back to 1946, the year after weapons of this dimension were employed by this country to conclude a war that this Nation had been forced to fight. The report of the Committee on Foreign Relations recites the details of these efforts, year by year, through the administrations of President Truman and President Eisenhower.

This has never been a partisan issue with the American people. In 1960, both President Kennedy and his Republican opponent for the Presidency, the then

Vice President, Mr. Nixon, repeatedly expressed their hopes that the negotiations with our allies and with the Soviet Union, started in 1958 at the urging of President Eisenhower, would prove fruitful.

The bipartisan support which this treaty has won speaks well for the guarantees which it embodies.

The limited test ban treaty, however, is challenged by its opponents, who assert that it casts a grave doubt on our continued and continuing superiority in atomic weapons. We have been advised, and I believe properly so, that today we are the world's strongest atomic power, both in technology and in the quantity of our weapons.

Doubt has been raised, however, that this limited ban will cause us to lose our advantage. From all the evidence I have read, the treaty offers us an opportunity in which the dangers are minimized. The values of such a ban, so eagerly desired by the world, offset the uncertainties which are bound to exist in any such agreement.

As the Preparedness Investigating Subcommittee has declared in its concluding paragraph:

The question is one of weighing relative risks.

The fear derives from exposure on four principal points. These points are: First. The significance of the 60- to 100-megaton bomb exploded by the Soviets.

Second. The question of the superiority of smaller nuclear weapons.

Third. The development of the anti-missile missile.

Fourth. The survivability of our deterrent force.

The record is filled with testimony on both sides of these questions. However, with the strong testimony from the Joint Chiefs of Staff, numerous scientists, our own leaders on the Joint Atomic Energy Committee, and our own distinguished Senate chairmen, Senator PASTORE and Senator ANDERSON, who are experts in this field, I feel that the advantages of the limited test ban treaty outweigh the fears expressed on these four points by opponents of the treaty.

On the question raised about Russian superiority because of testing of the 60-megaton bomb, I believe the judgment of our military and civilian leaders is convincing. We were free to explode all the giant bombs we chose during this recent period of uncontrolled testing. We made a decision, based on our knowledge and strategy, that such weapons were not necessary. We based this decision on the fact that our present arsenal contains more effective bombs for selected targets, rather than terror bombs of widespread range.

I am further assured by the testimony that the present state of our art would be sufficient to quickly produce such giant bombs without additional atmospheric testing, if such weapons were later needed.

On the second point, the versatility and quantity of our smaller nuclear weapons, with existing instruments of delivery for strategic bombing, give us

great security. True, these weapons have lower yields, but they still have the power to wipe out any known military or industrial targets contained in our strategic plans. The versatility and selectivity of all types of weapons in our arsenal make us the world's strongest atomic power. Our superiority in this field of quantity and types more than offsets any of the giant bombs the Soviets may produce.

Further, the provision permitting all kinds of underground testing enables us to continue, as has been promised by innumerable witnesses, to upgrade and update our weapons capability to any extent necessary.

On the third point, the development of the antiballistic missile, several challenges have been made. The testimony is conclusive that the Joint Chiefs and atomic experts believe that the problem here lies in the field of delivery, guidance, and selectivity of targets, rather than in the field of explosives. Underground testing of explosives is still possible and the testing of the intercepting missile itself is one that is permitted since it would not require atmospheric blasts.

Whatever protection against blackout or other exotic effects is needed, this must at all events be built into the missile and not into the explosive it is designed to carry.

On the fourth and last point, the vulnerability of our hardened missile sites has been discussed. Here again our experts are strong in their opinion that the Russians have gained no more knowledge in this field than we already possess. The large yield tests conducted by the Russians were not effects tests upon such sites, and there is no evidence that they gained this type of data from their recent explosions.

Thus the evidence I believe we have from our own leaders, who have spent years in specializing in this field, would indicate that both sides will be equally restricted by the treaty and that neither would gain a substantial advantage over the other.

One danger that could exist has been dispelled by assurances from the President and from agencies in charge of our development program that we will expand and improve our capabilities to detect atmospheric and underwater explosions to even a greater degree than we now possess.

The chance of cheating by illegal explosions will be even further reduced by continued improvement in our vast detection facilities.

Also reassuring is the guarantee that our laboratory facilities will be held in a state of readiness so that if the treaty is breached, we can immediately resume atmospheric testing on the finding by others. This ever-ready mobilization for further atmospheric testing not only guarantees our readiness but also keeps together the experts who have been so successful in weapons development in the past. It will also discourage those who might be inclined to cheat.

This team could be used promptly should it be deemed essential for our national security, or should the treaty or any of its terms be abrogated by the Soviets.

These were the requirements demanded by the Chiefs of Staff.

Their assurances were spelled out in detail by our military leaders in testimony before the Subcommittee on Defense Appropriations when on August 20, 1963, the Deputy Secretary of Defense, Mr. Gilpatric, summarized in these words:

We do have in this year's budget funds that would support the kind of an underground test program, the kind of nuclear effects test research program that would meet the conditions that the Joint Chiefs put upon their approval of the partial test ban.

Those opposed to ratification of the treaty have charged that it will commit the United States to a process of disarmament without preserving the principle of inspection, which has been the cornerstone of U.S. disarmament policy. As a number of Senators have pointed out, this is a false and misleading premise.

Dr. Harold Brown, director of Defense Research and Engineering, told the Foreign Relations Committee:

It does not limit arms development. It does not reduce armaments but it does reduce arms development. I believe that unless we get some kind of arms limitation as well as maintaining our own military capability the next 10 years are going to see further degradation in everyone's security as other nations obtain nuclear weapons, less responsible ones than have them now, I think that will make everyone less secure.

I don't say this treaty is going to solve that or produce the millennium but I think in the absence of this treaty, which has represented the first step, no one can go on to anything else.

We have been reminded continually during the course of this most worthwhile debate that the U.S. Senate must take into account, not only the hopes and aspirations of the American people, but public opinion throughout the world as it considers this limited nuclear test ban treaty. We will, of course, give first consideration to the security and welfare of the United States.

As a signatory to this treaty, we have no absolute guarantee that the United States can maintain its present security. We have the solemn word of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff that the treaty offers the United States clear and indisputable advantages.

General Taylor said:

The Joint Chiefs of Staff have reached the determination that while there are military disadvantages to the treaty, they are not so serious as to render it unacceptable . . . it is the judgment of the Joint Chiefs of Staff that, if adequate safeguards are established, the risks inherent in this treaty can be accepted in order to seek the important gains which may be achieved through a stabilization of international relations and a move toward a peaceful environment in which to seek resolution of our differences.

In the same vein, the Secretary of Defense, Mr. McNamara, declared:

The risks under the treaty are either small or under control, and the values of the treaty are substantial even if we consider only the military area. The scales are clearly tipped in favor of the treaty, Mr. Chairman. It has my unequivocal support.

The risk, well recognized though not clearly defined, that this treaty promises to reduce is the hazard that mankind will suffer for generations to come if atmospheric testing is not stopped. This is the risk that is recognized. This risk we assumed in the interest of national security when the development of weapons required it. It is a risk which can now be reduced.

Most of the people who have written to ask me to vote for ratification have been concerned primarily with the danger of radioactive fallout from continued atmospheric testing. A letter from a 26-year-old resident of Norman, Okla., is fairly typical. She said:

I am 26 years old, the mother of two small children. This is my first letter to a legislator. I was nudged into action by a recent news story which quoted the Public Health Service as saying the amount of radioactive strontium 90 in the Nation's milk this May was almost twice that of a year ago. I want to make it absolutely clear that I am totally in favor of the pending test ban treaty, and of any further steps taken to reduce the threat of nuclear war or of radioactive poisoning from the current arms race.

This writer went on to express her concern that the Federal Radiation Council has not established firm standards regarding the hazards of radioactive exposure to human health. I share her feelings, and I urge my colleagues who are members of the Joint Committee on Atomic Energy to keep pressure applied to this problem. In June of this year, I noted, the Subcommittee on Research, Development, and Radiation of this Committee held extensive hearings on this subject. At the conclusion, the council promised to provide such guidelines.

This subcommittee was told that after tests were started by the Soviet Union in 1961, the fallout rate rose sharply. By the end of 1962, more fission products were put into the atmosphere than in all preceding years of testing—and the Soviets were largely to blame.

The contamination of space and of the atmosphere by past tests has been a danger to all forms of life on this planet. Carried by rain and by air currents, no one is exempt from its dangerous effects. For peculiar reasons, the deposits collect irregularly in certain areas. But sooner or later, the fallout that is shot into space or air will reach the earth. What is the point at which, in our efforts to be secure, we contaminate the very elements which sustain life?

Of this we can be sure: Unlimited atmospheric and space explosions of bigger and bigger yield bombs will bring us closer to the time when the testing can be dangerous to life and can contaminate the food supplies of wide areas of the world. The prevention of such contamination, through limiting atmospheric and space testing, is vital to our very existence.

The commonsense and common hopes of the American people have been asserted once more in unmistakable terms. Since the founding of our Nation, we have sought peace and understanding among men. It has been a risky road, but it is one we willingly take. It can lead all humanity to a better world.

EFFECTS ON NUCLEAR WEAPONS AND COMMUNICATIONS OF CERTAIN PHENOMENA INDUCED BY NUCLEAR BLASTS

Mr. SPARKMAN. Mr. President, an article appearing in the September 16, 1963, issue of Missiles and Rockets, carrying the title "Soviets May Have Ultimate ABM," contains a number of substantial inaccuracies in the form of errors of fact and misleading statements, which should be corrected.

At the outset, the Missiles and Rockets article notes concern over the possibility that the electromagnetic pulse created by exploding very-high-yield nuclear weapons could deactivate U.S. missiles in their silos. It is stated that this concern is behind the opposition by many high military officers and nuclear scientists to the nuclear test ban treaty. The article fails to state that the overwhelming majority of both the military leaders and leaders in the field of nuclear science have registered support for the treaty. These include the Secretary of Defense, his Director of Defense Research and Engineering, the Joint Chiefs of Staff, and the Chairman of the Atomic Energy Commission. These are the men who are primarily responsible for the military security of the United States, and also the ones who have access to all available information upon which to reach a judgment concerning the existence or nonexistence of certain vulnerabilities in our retaliatory nuclear forces.

Possible uncertainties concerning the effects of electromagnetic pulse on U.S. missile systems, as well as other uncertainties, were in the mind of Secretary of Defense McNamara when he addressed the problem of missile-site survivability, in testifying before the Senate Foreign Relations Committee on August 13, 1963. The Secretary of Defense stated:

Our missile force is deployed so as to assure that under any conceivable Soviet first strike, a substantial portion of it would remain in firing condition. Most of the land-based portion of the force has been hardened, as well as dispersed. Minuteman silos are designed to withstand thermal and pressure effects and ground motion effects of typical Soviet weapons detonated at relatively close quarters.

The Minuteman control posts are protected by extreme hardening. In addition, we have duplicative facilities which will in the future include the capability of launching each individual Minuteman by a signal from airborne control posts.

Uncertainties . . . will continue to be compensated for by conservative designs, wide dispersal and large quantities of missiles.

Dr. Harold Brown, in testimony before the same committee on August 21, 1963, added the following:

In the future we expect we will be able to fire advanced U.S. missile systems on the basis of a signal sent out from an aircraft without requiring survival of the launch control centers, which presently send the signal to launch the missile, and without requiring survival of their cable connections to the missile site.

This will eliminate any effect of vulnerability of launch control centers or of control cabling.

Therefore, those who are best qualified to judge have concluded that any uncertainties regarding EMP—electromagnetic pulse—do not constitute an unacceptable risk to the Nation's security in entering into the nuclear test ban treaty.

The Missiles and Rockets article has indicated that the "ultimate" ABM may be one which de-activates missiles in their silos. The statement is made that:

Achievement by the Soviets of the capability of using their first strike offensive weapons simultaneously as defensive weapons that would destroy the electronics of U.S. silo-based missiles would wipe out the ability of the United States to retaliate.

This statement is imprecise and inaccurate in several important respects.

First, the U.S. retaliatory capability is derived from large numbers of weapons of various yields, capable of being delivered on target by a variety of means—the "weapons mix." Our strategic retaliatory forces consist today of land-based missiles, such as Minuteman, Titan, and Atlas; sea-based missiles, such as the submarine-launched Polaris; and long-range aircraft, primarily B-52's. The sea-based and aircraft-deliverable weapons which today constitute the great bulk of the U.S. retaliatory force would be unaffected by any possible EMP vulnerability pertaining to the land-based missiles.

Second, with regard to the ability of our land-based missiles, and, in particular, our hardened Minuteman systems, to survive a Soviet surprise attack, Secretary McNamara has stated:

We know, and the Soviets know, that in the event of a surprise Soviet first strike, at least a substantial proportion of our Minuteman missiles will survive.

On the question of a possible EMP vulnerability of our land-based missiles, the Missiles and Rockets article cites Gen. Thomas S. Power, commander of the Strategic Air Command, as having expressed "fear . . . in depth." General Power is an outspoken critic of the nuclear test ban. However, during the course of hearings before the Preparedness Investigating Subcommittee, headed by the Senator from Mississippi [Mr. STENNIS], General Power was asked the question:

Concerning the Minuteman system, do you have confidence in the ability of this system to perform its assigned mission?

General Power replied:

Yes, I do. I have a high confidence factor.

General Power, whose testimony before the Stennis subcommittee is frequently referred to in the Missiles and Rockets article, may disagree with the Secretary of Defense on the degree of uncertainty that is acceptable to him; but there seems to be no apparent disagreement with respect to the conclusion that our Minuteman system is one upon which the United States can justifiably rely.

It would also be well to clear up some of the confusion created by the Missiles and Rockets article in categorizing as an antiballistic missile a possible Soviet

weapon designed to knock out U.S. missile silos. The popular conception of an ABM is one which is designed to intercept and destroy incoming missiles. A weapons system with the assigned mission of destroying enemy missiles prior to being launched is generally referred to as a counterforce weapon. However, the Missiles and Rockets article has, unfortunately, lumped the two different concepts together in such a way as to misinform the reader.

For example, the article contains the statement:

The Soviet lead in antiballistic missile development has been acknowledged even by administration supporters in the test ban debates. It is based on the long range ability of strong electromagnetic pulses to cripple the electronics system of a missile so that it cannot be fired.

The view as to the relative capabilities of the United States and the U.S.S.R. in the ABM field, as considered by the administration officials in the test ban debates, was based on the generally accepted notion of a defense against incoming warheads that had already been launched. The question of electromagnetic pulse raised in the article is irrelevant to this generally held conception of an ABM system. Concerning the substance of whether the United States or the Soviet Union is ahead in the development of an ABM system, Secretary McNamara has stated:

The best present judgment is that our design efforts are comparable in magnitude and success with those of the Soviets. Any deployed system which the Soviets are likely to have in the near future will probably not be as effective, almost certainly not more effective, than the Nike-Zeus system. It should be noted that the United States decided not to deploy the Nike-Zeus because its effectiveness was inadequate.

Dr. Brown has expressed his view of the relative capabilities of the two sides, as follows:

I think we are roughly comparable (the United States and U.S.S.R.). If I were forced to say one side or the other is ahead on knowledge, I would say that we were, but I don't think that is a very firm statement on my part.

A better judgment, I think, is that we are about equal.

In the Missiles and Rockets article, we also find, in reference to the Preparedness Subcommittee report, the following:

It noted that the character of the recent Soviet high-yield tests indicated they were centered upon antiballistic missile development.

This statement, like the statement previously discussed, is misleading in implying a connection with electromagnetic phenomena, and is similarly irrelevant. Moreover, it confuses Soviet high-yield tests with high-altitude experiments. The Stennis subcommittee report referred to a series of high-altitude operations which, if properly instrumented, could have provided substantial and important data on various types of radar blackout and nuclear effects relevant to the solution of various problems in connection with ABM development. As to relative knowledge

in the field of these nuclear effects, Dr. Brown has stated:

With respect to high altitude tests carried out for the purpose of determining the effects of nuclear bursts on communications blackout, radar blackout, and nuclear weapons vulnerability, Soviet and United States experience appear to be comparable.

Each side has had about the same number of tests, over yield ranges and altitude ranges which are comparable though not identical, the number of nuclear tests carried out by related missile tests appears to be about the same although different techniques for making the measurements were used by the two countries.

Finally, the thrust of the Missiles and Rockets article is contained in the statement that:

EMP, however, might be capable of incapacitating a great number of missiles at once.

Secretary McNamara, in reference to missile site vulnerability, stated—

The most pessimistic view * * * suggests a vulnerability ratio for our hardened, dispersed Minuteman sites of less than two sites killed on the average by a single very-large yield Soviet missile.

The numbers of missiles on each side are such that a 2-for-1 kill ratio would leave the United States with the capability to destroy the Soviet Union, after absorbing a Soviet first strike.

REPLY TO KENNEDY TAX SPEECH

Mr. MILLER. Mr. President, last evening, the President of the United States went before the American people on television and radio to seek, as is his prerogative, to build up public opinion in support of his position that his tax cut bill is in the national interest.

We trust that equal prime time will be given by the television and radio stations to enable the other side of the argument to be heard by the American people. And in order that public opinion will have a fair chance to be fairly developed, we trust that the other media of the press will see to it that equal coverage in an equally prominent place is given to the opposite viewpoint. For example, I note that front page coverage was given by several newspapers to the President's speech. It would be only fair to have an equal amount of front page coverage given by these newspapers to those of us who wish to rebut the President's argument. This is particularly so, in light of the President's own evaluation of the tax cut bill, when he said:

No more important legislation will come before the Congress this year.

Let everyone understand that all of us agree with the President that the high wartime and postwar tax rates we are now paying do not leave in private hands enough money to keep this country's economy growing and healthy; that they have helped to cause recessions in previous years; that unless they are reduced they can cause recessions again; that we must create more than 10,000 new jobs every day in the next 2½ years, to meet the demands of a growing work force and to reduce unemployment to acceptable levels; that we cannot effec-

tively attack the problems of teenage crime and delinquency until we attack teenage unemployment; that we cannot effectively solve the problems of racial injustice until we create more jobs for all; that we cannot effectively tackle the challenge of automation until there are more jobs for the men who are being thrown out of work by machines; that recession means high unemployment and high budget deficits; that of all kinds of waste, unemployment is the worst; that 7 million more young people are coming into the labor force in the 1960's than in the 1950's, and that today's children will be aware of this when it is time for them to seek work; that if we cannot create more jobs—if we permit unemployment to grow—then no worker can be sure of his job, and no businessman can be sure of his future; that in recent years our loss from excessive unemployment has been almost 20 times as great as our loss from strikes; that recessions are not inevitable; and that there are as many men and women out of work now as there have been in some recession years—and this notwithstanding the last that as a result of the actions of the President and his Democratically controlled Congress, 165,000 more employees have been added to the Federal payroll and over \$15 billion has been added to our national debt, for future generations to pay.

For the President to say all these things is merely to state the obvious. One wonders why he took so much time to do so.

The real point he should have spent all his time discussing is whether or not his tax cut bill, accompanied—as it will be—by billions of dollars of more deficit spending and billions of dollars of more inflation, will contribute to solving all of the problems by getting our economy moving again. He thinks it will. I say it will not.

The President may talk all he wishes about the stability of our wholesale price index. He may claim that retail prices have held remarkably steady. The point he misses is that almost all our people buy at retail prices—not wholesale prices; and that since he took office, the retail Consumer Price Index has gone from 214.5 to an alltime high of 221.3, while the purchasing power of our dollar has dropped from 46.6 cents—compared to a 1939 dollar worth 100 cents—to an alltime low of 45.2 cents.

For 1961 and 1962, while our Federal debt was increasing nearly \$14 billion, due to deficit spending, inflation reduced the purchasing power of our people's money by \$14 billion. This is inflation at the rate of \$7 billion a year—equivalent to a 10 percent income tax increase. The tragic fact is that the American people do not yet realize what has hit them; but they have been hit. And under the spending proposals of the President, they will be hit just as bad, or worse, in 1963 and 1964. This is what is wrong with the President's tax cut bill.

Everyone wants a meaningful tax cut. But to be meaningful, the tax cut must be in terms of stable dollars. Surely the President should realize that no one wants to have more dollars to spend if all